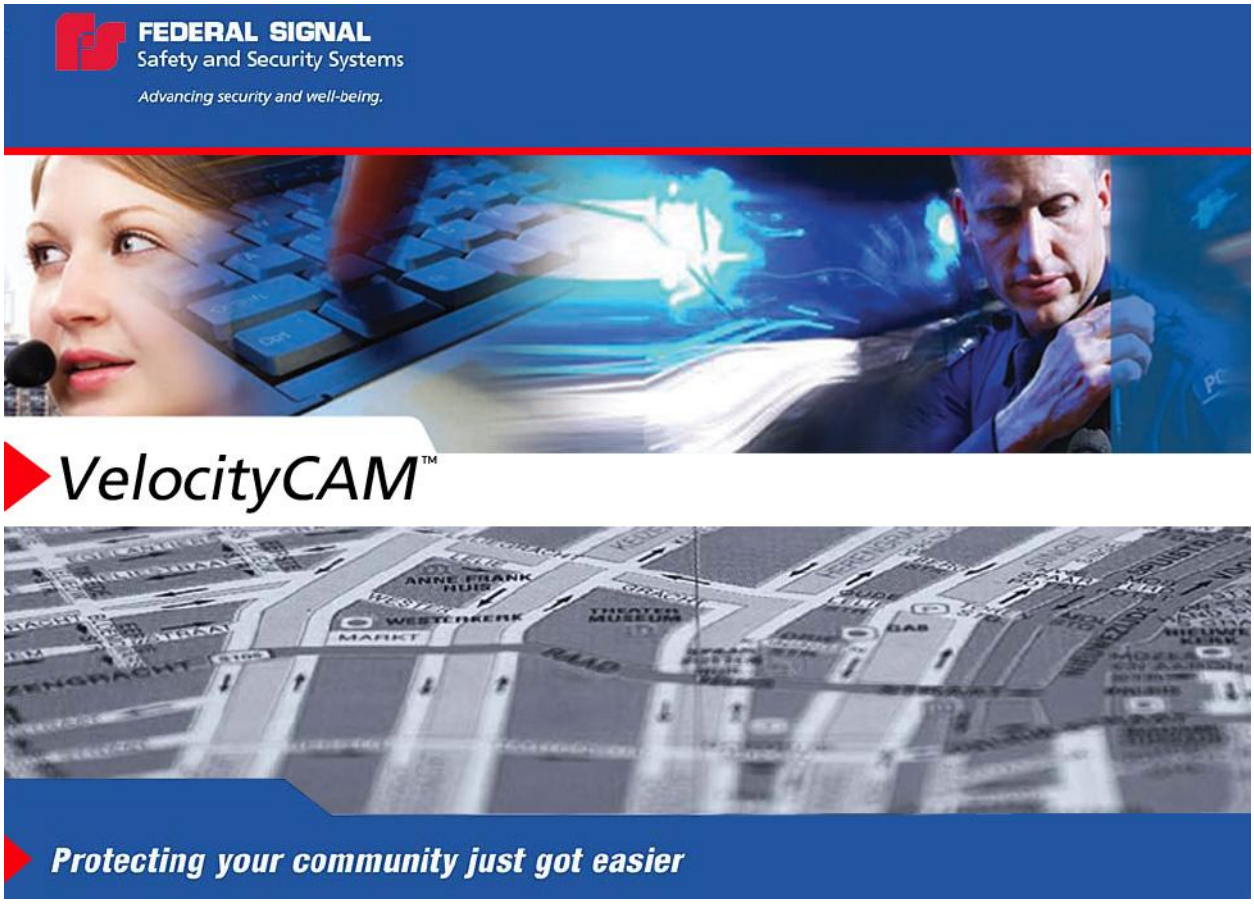
VELOCITYCAM™

In-Car Video & Data System:
User's Manual



© 2009 Federal Signal Corporation (FS)
2645 Federal Signal Drive, University Park, IL 60484
(708)-534-3400

255376A _909
REV. A
Printed in U.S.A.

NOTICE

This document provides information regarding the specific use of VelocityCAM. It is the responsibility of the officer to comply with all applicable copyright laws.

Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Federal Signal Corporation.

Information contained herein is subject to change without notice. Unless otherwise noted, any references to companies, organizations, products, domain names, e‑mail addresses, logos, people, places, and/or events used in examples herein are fictitious and no association with those listed above is intended or should be inferred.

VelocityCAM is a registered trademark of Federal Signal Corporation in the United States and/or other countries.

All other trademarks are property of their respective owners.

August 2009

© 2009 Federal Signal Corporation (FS). All rights reserved.

Licensed and Manufactured by Federal Signal, Inc.

Use and distribution limited solely to authorized personnel

All revisions to this manual must be coordinated with engineering.

The use, disclosure, reproduction, modification, transfer or transmittal of this work for any purpose in any form or by any means without the written permission of FS, Inc. is strictly prohibited.

End User License Agreement

IMPORTANT: READ CAREFULLY. This End User License Agreement ("Agreement") is a legal agreement between you (either an individual or a single entity) and Federal Signal Corporation ("Federal Signal") for the VelocityCAM software and all associated media, printed materials, and "online" or electronic documentation (collectively "Software Product").

SOFTWARE PRODUCT LICENSE

The Software Product is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The Software Product is licensed, not sold, to you pursuant to the terms of this Agreement.

1. GRANT OF LICENSE. This Agreement grants you the following rights:

Use of Software. The VelocityCAM Software Product allows for one user license. You may install and use one copy of VelocityCAM Software on one computer.

2. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS.

Not for Resale Software. Notwithstanding other sections of this Agreement, you may not resell, or otherwise transfer for value, any portion of the Software Product.

Limitations on Reverse Engineering, Decompilation, and Disassembly. You may not reverse engineer, decompile, or disassemble any portion of the Software Product.

Separation of Components. The Software Product is licensed as a single product. Its component parts may not be separated for use on more than one computer.

Rental. You may not rent, lease, or lend any portion of the Software Product.

Support Services. Federal may provide you with support services related to the Software Product ("Support Services"). Use of Support Services is governed by the Federal policies and programs described in the user manual, in "online" documentation, and/or in other Federal Signal-provided materials. Any supplemental software code and all associated media, printed materials, and "online" or electronic documentation provided to you as part of the Support Services shall be considered part of the Software Product and subject to the terms and conditions of this Agreement. With respect to technical information you provide to Federal Signal as part of the Support Services, Federal may use such information for its business purposes, including for product support and development. Federal Signal will not utilize such technical information in a form that personally identifies you.

Transfer of Rights. You may not transfer any right under this Agreement without the written consent of Federal.

Termination. Without prejudice to any other rights, Federal may immediately terminate this Agreement if you fail to fully comply with all of the terms and conditions herein. In such event and in addition to any other obligations arising from the termination of this Agreement, you must destroy all copies of the Software Product and all of its component parts.

3. UPGRADES. If the Software Product is labeled as an upgrade, you must be properly licensed to use a product identified by Federal as being eligible for the upgrade in order to use the Software Product. A Software Product labeled as an upgrade replaces and/or supplements the product that formed the basis for your eligibility for the upgrade. You may use the resulting upgraded product only in accordance with the terms of this Agreement.

4. COPYRIGHT. All right, title, interest and copyrights in and to the Software Product (including but not limited to any images, photographs, animations, video, audio, music, text, and "applets" incorporated into the Software Product), the accompanying printed materials, and any copies of the Software Product are owned by Federal. The Software Product is protected by copyright laws and international treaty provisions. You may copy the printed materials of the Software Product; provided, however, that any such copies are used for the sole purpose of in-house training on the use and operation of the Software Product.

5. U.S. GOVERNMENT RESTRICTED RIGHTS. The Software Product and documentation are provided with Restricted Rights. Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or subparagraphs (c)(1) and (2) of the Commercial Computer Software-Restricted Rights at 48 CFR 52.227-19, as applicable.

LIMITED WARRANTY

CUSTOMER REMEDIES. Federal Signal's entire liability and your exclusive remedy shall be, at Federal Signal's option, either (a) return of the price paid, if any, or (b) repair or replacement of the Software Product that does not meet Federal's Limited Warranty and which is returned to Federal with a copy of your receipt. This Limited Warranty is void if failure of the Software Product has resulted from accident, abuse, or misapplication. Any replacement Software Product will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer. Outside the United States, neither these remedies nor any product support services offered by Federal are available without proof of purchase from an authorized international source.

NO OTHER WARRANTIES. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, FEDERAL DISCLAIMS ALL OTHER WARRANTIES AND CONDITIONS, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NON-INFRINGEMENT, WITH REGARD TO THE SOFTWARE PRODUCT, AND THE PROVISION OF OR FAILURE TO PROVIDE SUPPORT SERVICES. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHERS, WHICH VARY FROM STATE/JURISDICTION TO STATE/JURISDICTION.

LIMITATION OF LIABILITY. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL FEDERAL BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THE SOFTWARE PRODUCT OR THE PROVISION OF OR FAILURE TO PROVIDE SUPPORT SERVICES, EVEN IF FEDERAL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY CASE, FEDERAL'S ENTIRE LIABILITY UNDER ANY PROVISION OF THIS AGREEMENT SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE SOFTWARE PRODUCT; PROVIDED, HOWEVER, IF YOU HAVE ENTERED INTO A FEDERAL SUPPORT SERVICES AGREEMENT, FEDERAL'S ENTIRE LIABILITY REGARDING SUPPORT SERVICES SHALL BE GOVERNED BY THE TERMS OF THAT AGREEMENT. BECAUSE SOME STATES AND JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

EXPORT LAW ASSURANCES

You acknowledge that the Software Product is subject to restrictions and controls imposed under the export control laws and regulations of the U.S.A. and any amendments thereof. You certify that neither the Software Product nor any direct product thereof is being or will be exported, acquired, shipped, transferred or re-exported, directly or indirectly, to: (i) any country or region prohibited under such laws and regulations; (ii) any end user who you know or have reason to believe will utilize them in the design, development or production of nuclear, chemical or biological weapons; or (iii) any end user who has been prohibited from participating in the U.S.A. export transactions by any federal agency of the U.S.A. government. You also acknowledge that the Software Product may include technical data subject to export and re-export restrictions imposed by U.S.A. law.

MISCELLANEOUS

If you acquired this product in the United States, this Agreement is governed by the laws of the State of Illinois.

You shall institute reasonable measures to ensure compliance with this Agreement. Upon the request of Federal, you shall provide reports as to usage as may be necessary to verify compliance with this Agreement. Federal shall have the right, upon reasonable notice, to inspect your facilities to verify compliance with this Agreement.

You expressly save and hold Federal Signal, its subsidiaries, agents and affiliates harmless from any and all liability of any kind or nature whatsoever to your customers, distributors and third parties which may arise from your acts under this Agreement.

This Agreement constitutes the entire agreement with respect to the software product and supersedes any other agreement or discussions, oral or written. This Agreement may not be changed or waived except by a written amendment signed by you and an officer of Federal. No other person has the authority on our behalf to change or waive this agreement.

A waiver by either party of any term or condition of this Agreement will not be deemed a waiver of the term for the future, or of any subsequent breach of it.

The invalidity or unenforceability of any provision of this Agreement will not affect the validity or enforceability of any other provision. Such invalid or unenforceable provision shall be deemed to be severed from this Agreement and the Agreement shall be construed as if such provision was never inserted into it.

No action, regardless of form, arising out of this Agreement, may be brought by you more than two years after the facts giving rise to the cause of action have occurred, whether those facts by that time are known to or reasonably ought to have been discovered by you.

In this Agreement, words importing the singular include the plural and vice versa. Words importing gender include all genders and words importing persons include corporations and vice versa. The division of this Agreement into sections and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Agreement or any part of it.

Limited Warranty

The Public Safety Systems Division of **Federal Signal Corporation** warrants each new product to be free from defects in material and workmanship, under normal use and service, for a period of one year on parts replacement and factory-performed labor from the date of delivery to the first user-purchaser. Warranty on hardware may be extended when an annual maintenance agreement is purchased for up to five years from date of delivery. This warranty includes one year software support via telephone and software upgrades. Warranty on the VelocityCAM software can be extended as long as an annual maintenance agreement is purchased.

During this warranty period, the obligation of Federal Signal is limited to repairing or replacing, as Federal may elect, any part or parts of such product which after examination by Federal discloses to be defective in material and/or workmanship.

Federal Signal will provide warranty for any unit which is delivered, transported prepaid, to the Federal Signal factory or designated authorized warranty service center for examination and such examination reveals a defect in material and/or workmanship.

This warranty does not cover travel expenses, the cost of specialized equipment for gaining access to the product, or labor changes for removal and re-installation of the product. The Federal Signal Corporation warranty shall not apply to components or accessories that have a separate warranty by the original manufacturer.

This warranty does not extend to any unit which has been subjected to abuse, misuse, improper installation or which has been inadequately maintained, nor to units which have problems related to service or modification at any facility other than Federal Signal factory or authorized warranty service centers. Moreover, Federal Signal shall have no liability with respect to defects arising in products through any cause other than ordinary use (such as, for example, accident, fire, lightning, water damage, or other remaining acts of god).

THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL FEDERAL SIGNAL BE LIABLE FOR ANY LOSS OF PROFITS OR ANY INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY SUCH DEFECT IN MATERIAL WORKMANSHIP.

Safety Messages to Users of Federal Signal Mobile Camera Systems

⚠ WARNING

People's lives depend on your proper installation and servicing of our products. It is important to read and follow all instructions shipped with this product. In addition, listed below are some other important safety instructions and precautions you should follow:

- Read and follow all safety and operating instructions before installing, configuring, or operating the VelocityCAM. Safety and operating instructions are also located in the VelocityCAM software interface and can be accessed by clicking the **Help** button.
- VelocityCAM may fail to operate as intended if configured incorrectly. Configuration should only be performed by personnel thoroughly familiar with the VelocityCAM operating instructions and the intended method of use.
- Do not open the camera element, wireless or in-car microphone, or control box. There are no user-serviceable parts inside and opening any component will void the warranty.
- You should frequently inspect the camera system to ensure that it is operating properly and that it is securely attached to the vehicle. The front face of any installed cameras should be kept clean and free from any accumulated dirt or grime so that the cameras may provide the clearest image. Obstructions to the camera image limit the effectiveness of the system.
- During the use of this system it is strongly advised that users comply with all existing traffic rules and regulations. It is imperative that the driver must not watch or operate the device or any component thereof while driving. It may lead to distraction, thereby causing an accident. Please park the vehicle in a safe place to watch or operate the device, being careful not to obstruct the field of view of the driver.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the product.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death to you or others.

Table of Contents

Safety Messages to Users of Federal Signal Mobile Camera Systems vii
Purpose 1

DOCUMENT ORGANIZATION 2

INSTALLING VELOCITYCAM 3

Minimum Installation Prerequisites 3
CAM Workstations/Laptops 3
CAM Server 3

INTRODUCTION TO VELOCITYCAM 4

Standard VelocityCAM Terminology 5
VelocityCAM Overview 5
Functionality 6
Using Jurisdictions 7

VELOCITYCAM COMPONENTS 8

Software 9
Front Camera 10
Rear Camera 11
Quantum Box 12
Wireless Microphone 13
Optional Components – GPS Receiver 14
Data Retrieval & Storage 15

VELOCITYCAM OPERATION 16

Login Screen 16
Requirements 16
Steps to Login 17

eo Control Panel 18
Standard Information Button Bar 20
Standard Functions 19
"I" Connection Status Information button 20
Save Window Position button 20
System Status Line 21
Available Hard Drive Space Indicator 21

Camera Control Active Indicator 21
System Microphone Indicator 22
Program Help Index 22
GPS Indicator button 23

Remote Camera 24
Establishing a Remote User Connection 24

Front and Rear Cameras (CAM 1 & CAM 2) 26
Camera 1 26
Camera 2 27

Recording 28
Rec 1 & Rec 2 28

Picture 30
Capturing & Viewing Pictures 30

Transmit – "Watch Over Me" 33
Using Watch Over Me 33

License 34
Zooming In on a License Plate 35

Zoom In/Zoom Out 35
Using the Standard Zoom feature 36

Mode 37
Setting Modes to Video 38
Permanently Storing Video 39
Clearing Video Modes 39

Map 40
Predefining Zooms 40
Follow 41
Rotate 42
Snap To 42
Validating Position 42
Deleting Way Points 42
Legend 42
Hidden Menu Options 43

Voice Commands 49

Available Voice Command Options 50
Issuing a Voice Command 53

Upload 54
Wireless Upload 55
Burning Images & Video to CD/DVD 55
Removable Drives 56
Wireless Upload of Images, Video & Data 56

Chat 57
Using Chat 57
Sending a Message 57
Creating a New Room 58
Entering an Existing Room 58
Viewing a User's Info 58
Clearing a Message 58
Refreshing Chat Lists 59

Enhanced Configuration Module 60
Hide 62
Automated License Plate Recognition (ALPR) 63
Playback 64
Replaying Videos 65
Using Slow Motion 65
Stopping Videos 66
Fast-Forwarding Videos 66
Rewinding Videos 66
Adjusting Video Speeds 66

Velocity Link 68
Using the VelocityLink Browser 68

Response 70
Submitting a Response Query 71

SmartSiren® Accessory Toolbar 72
E-Ticket 73
Way Point 74
Adding a Way Point 74

Radar 75
Form Transparency 76
Programming the Radar Feature 76

Full View 77
Entering Full View Mode 77
Canceling Full View Mode 78

Purpose

This document was written for officers, front line responders and other industry professionals, meaning those individuals that would have a general understanding of the use of an In-Car Video & Data system. It is not written to act as a training manual instructing officers as to the nature, role, or need of a CAM system.

This document presents standard functional specifications for VelocityCAM and contains instructions for using VelocityCAM within your agency's specified vehicle or network. The specifications found in this document are intended to be clear and concise, illustrating the approach and benefits offered through the system's capabilities.

As you will quickly begin to recognize, VelocityCAM offers a robust lineup of features and functionality. The document should be seen as a guide and general reference for familiarizing yourself with the location and application of each of those features in addition to highlighting the different methods for which they can be used.

This document does not provide details regarding the installation or configuration of the VelocityCAM system.

Document Organization

This document is organized in the following manner:

- **Installing VelocityCAM** - provides details and minimum requirements for hardware and equipment specifications for proper installation.
- **Introduction to VelocityCAM** - provides specific details for the purpose of this Product Manual and an overview of VelocityCAM to familiarize the officer with the application.
- **Operating VelocityCAM** - describes the features and functions of VelocityCAM as well as details regarding its equipment and components. The tasks outlined will assist in the setup, customization and management of the VelocityCAM application.

Installing VelocityCAM

The items outlined in this section are designed to assist the user in the setup, customization and management of the VelocityCAM system. If VelocityCAM has not already been installed to your Windows based mobile computer, and you have the permissions necessary to install new programs on your system, you can install VelocityCAM yourself. Installing the VelocityCAM software is a simple process.

Minimum Installation Prerequisites

The following are the **minimum** specifications for both the CAM server and CAM workstations:

CAM Workstations/Laptops

Intel Core 2 Duo Processor (2.0 GHz or higher)

Microsoft Windows XP Professional (SP2) (Windows Vista not recommended)

1 GB RAM, preferably 2 GB

40 GB hard drive, preferably 80 GB

NTFS File System

Two free 2.0 USB ports

64 MB graphic card, 128 MB preferred

Screen resolution: 1024 x 768 pixels, 32 bit

802.11G Wireless Adapter (wireless upload option)

Note: VelocityCAM server specs are contingent on agency size and how many VelocityCAM units will be recording video.

CAM Server

Intel Pentium Duo Core 2.0 GHZ or higher

4 GB of RAM (minimum)

Hard drive space will vary depending on calculation of units in the field and amount of video recorded daily and how long videos are stored

Raid 5 Hot Swappable Hard Drives

128 MB Graphic Card

Screen resolution: 1024 x 768 pixels, 32 bit

Sound Card and Speakers

SQL 2005 Standard Edition

Windows 2003 Server (minimum)

Two 100 MB network cards

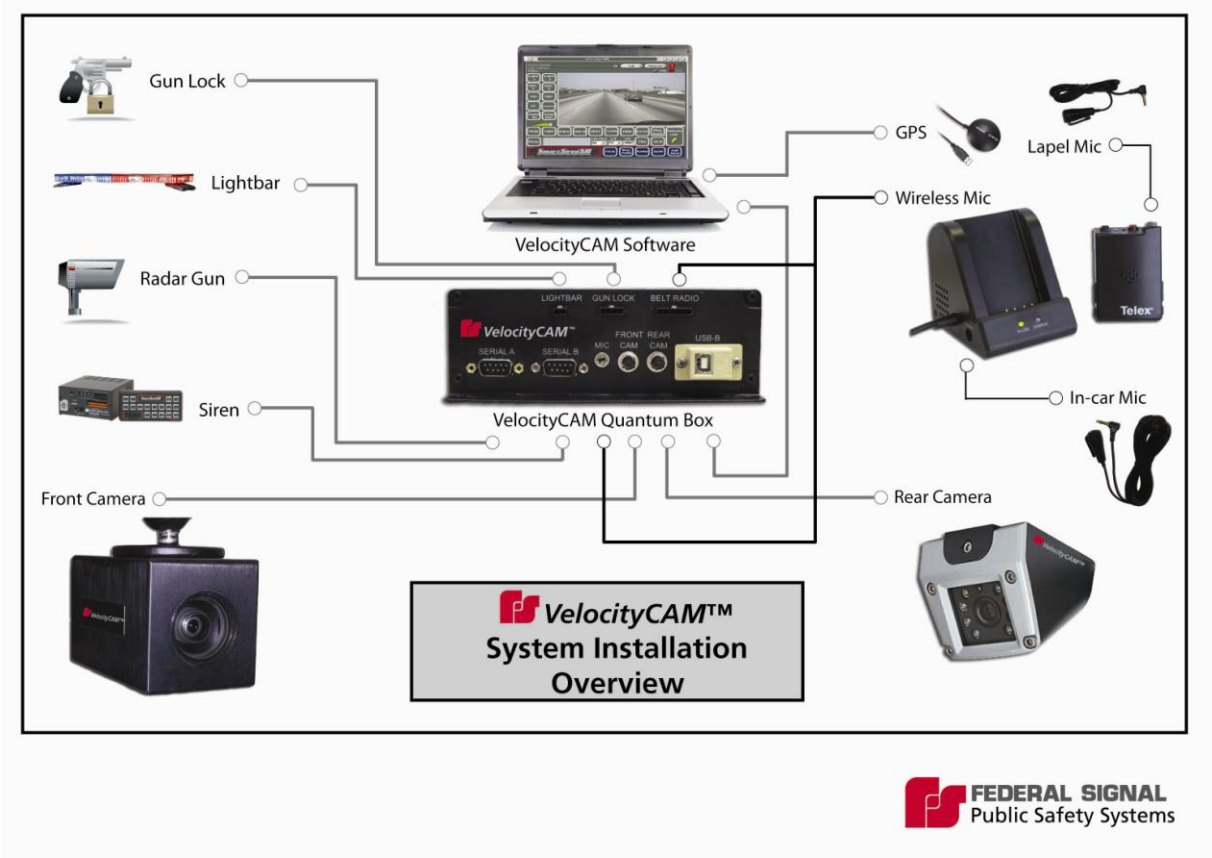
DVD Burner

Keyboard, mouse, and monitor (optional depending on whether there is a KVM switch installed)

USB port

Introduction to VelocityCAM

VelocityCAM™ Video & Data System is cutting edge technology at its best that can include two cameras, wireless microphone, mapping, NCIC interface, AVL abilities, fleet tracking, wireless upload capability and remote access and control of the system. The system can be activated by the radar gun, light bar, siren, microphone, laptop, and gun lock.



Standard VelocityCAM Terminology

As you will soon learn, VelocityCAM allows you to completely customize fields and field labels within the Digital Video application. In order to effectively navigate the software, you need to be aware that in this manual, standard terminology is being used for the sole purpose of clarity and consistency. Please check with your agency as to specific terms or names used if a discrepancy in terminology is found.

VelocityCAM Overview

The Virtual DVR system allows users to control the digital video from the laptop so no extra storage devices are needed in the unit. Support is much more efficient as troubleshooting can be done remotely by dialing into the laptop instead of having to ship the hardware and have it repaired and then returned. This saves time when there are repairs or upgrades to apply.

VelocityCAM is a highly configurable system giving the user ability to adjust settings such as frames per second, storage paths, video sizes, buffer timers, compression, overlay options, video custom rotations, watermarks, digital recorder settings, mapping configurations, video upload setting, NCIC settings and more. VelocityCAM offers the following features:

Standard Features	
Virtual DVR	Record buffer
Automatic Camera Activation	Controls up to (2) cameras
Wireless Microphone	Voice commands automatically
In-car Microphone	

Enhanced Features	
Street-level Mapping	GPS (AVL) capability
NCIC Access	Remote video control
Fleet Tracking	E-Ticket (not available in all states)
Way-point	Fully integrated with VelocityMDS (Mobile Data Systems)

Applications	
Law Enforcement	Fire, Rescue & EMS
Military Vehicles	Command & Control Vehicles

Functionality

VelocityCAM has been designed and developed with commonality and ease-of-use in mind:

Toolbars – a standard toolbar is conveniently located at the top of the main screen, equipped with standardized buttons/icons that allow the officer to access system features.

Feature Buttons – These large, easy to use buttons, located along the left side and the bottom of the main and secondary screens, provide access to all of the application's features, containing top-level menu items with some accessing a separate list of commands and features.

Hidden Menus or *Right-Click Menus* - in VelocityCAM display menu options to commonly used features and keyboard shortcuts are displayed in a familiar pop down style menu, adding convenience and saving you valuable screen space. All text fields in VelocityCAM are equipped with the following right-click options:

Standard Hidden Menu Options	Description
Undo	Goes back a step to the previously entered key or command
Cut	Cuts highlighted text or objects
Copy	Copies highlighted text or objects
Paste	Places previously cut or copied objects
Delete	Removes or erases highlighted text or objects
Select All	Highlights all text and objects

Directional Scrollbars - can be found located on the right side and at the bottom of many informational windows in VelocityCAM.

Built-in Help Index - helps officers by enabling them to peruse and quickly become familiar with VelocityCAM's terminology and basic functionality. Start here for how-to, troubleshooting, and product information.

Using Jurisdictions

VelocityCAM is multi-jurisdictional which means:

- More than one jurisdiction can utilize the same databases on the same network concurrently with no undesired interaction between them.
- Local and system-wide configurations are configured based upon jurisdiction.
- VelocityCAM officers are limited to which jurisdiction they can work with based upon security rights setup by the agency.

VelocityCAM Components

VelocityCAM is an innovative, high-tech, affordable mobile video solution designed for agencies of any size. Enabling fleet audio/video capturing, VelocityCAM utilizes advanced, cutting-edge technology. Only VelocityCAM offers a Virtual DVR and gives you the ability to run vehicles and subjects through the National Crime Information Center (NCIC).

Software

VelocityCAM is just one more innovation developed by Federal Signal to advance the safety, security and well-being of our community.

Software - Model # RC-S-CAM	
Voice Recognition	Optional integration into Siren Controller
Automatic recording when light bar, siren, gunlock, or wireless microphone are activated	Zoom in on the vehicle to capture license plate
Optional integrated mapping with AVL support	

Front Camera

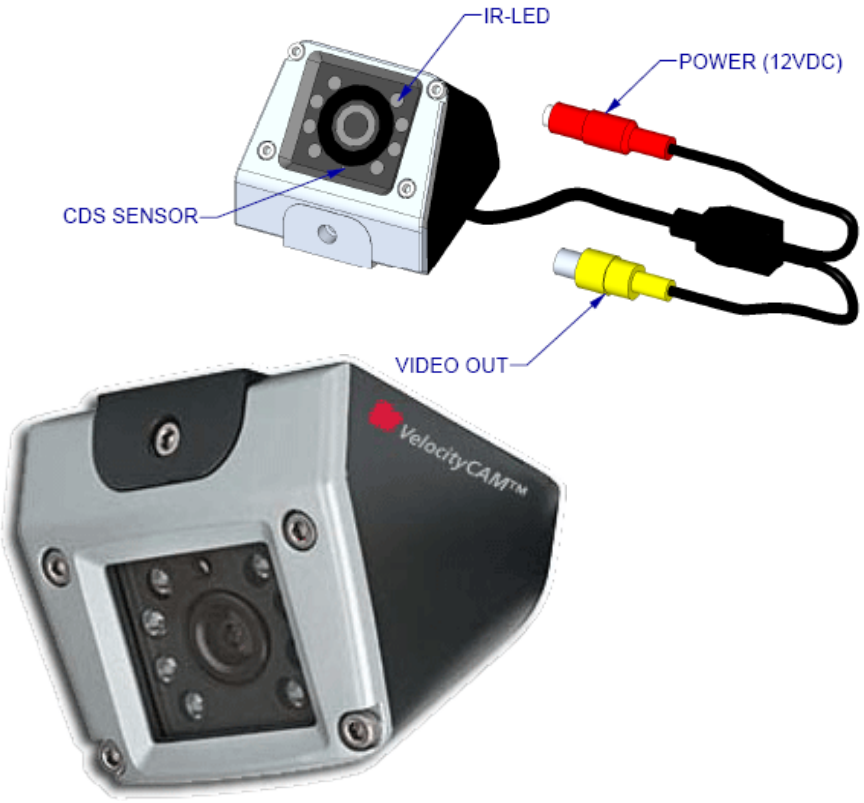
VelocityCAM's front camera incorporates a high-sensitivity 1/4-type EXview HADTM CCD, which allows images to be captured at a minimum illumination as low as 0.1 lx.

With a newly developed slow AE response function, the camera can adapt to abrupt changes in lighting while capturing fine image details.

Front Camera - Model # RC-H-CAM-FC	
Color Video	1/4-type EXview HAD CCD
36x Optical Auto Focus Zoom Lens	432x Zoom Ratio (36x optical, 12x digital)
f = 3.4 mm (wide) to 122.4 mm (tele)	F1.6 to F4.5
Angle of view (H): 57.8° (wide) to 1.7° (tele)	Size: 2.53" W x 2.63" H x 4.45" L
Power: 12 VDC	

Rear Camera

This camera is built tough to withstand direct impacts and the heavy-duty mount is made to ensure that the camera cannot be dislodged. The wide angle lens will give you complete coverage. With the 8 infrared LED's you will be able to see in total darkness. The sturdy die cast housing is waterproof and vibration resistant for the toughest jobs.



Rear Camera - Model # RC-H-CAM-RC	
420 Lines of Resolution	0.1 Low Light Lux @ F2.0
8 Infrared LED's w/30' Nitetime Range	Wide Angle 120° Field Of View Lens
Tough IP-67 Rated Die cast Aluminum Housing	Size: 2.4" W x 2.2" H x 3.3" L
Power: 12 VDC @ Only 475mA	

Quantum Box

The Quantum Box is an intermediate device that is used to monitor the status of your vehicle's lightbar, siren, shotgun rack and even the radar unit. Whenever a specific action occurs with the device, such as the shotgun lock is released or the light bar is activated, the Quantum Box triggers the forward facing camera (Camera 1) to begin recording.

Quantum Box Model # RC-H-CAM-QB	
D1 resolution at a full-motion	Standard high-speed USB 2.0 interface
System startup by activation of the Gunlock, radar gun, siren, light bar and Belt Radio microphone	12VDC power

Wireless Microphone

The 2.4GHz Digital Police Wireless Microphone system is designed specifically for law enforcement video applications. The system is comprised of: the compact, rugged police belt pack transmitter, which is worn on the belt or placed in a pocket, the miniature police lapel microphone, which clips on a lapel and permits complete freedom of movement, the internal microphone and the police receiver and recharge station, which mounts in the police car and outputs the received audio to the car's video recording system. The system provides crystal clear audio, which can be vital for recorded evidence. The transmitter and receiver synch in the charging cradle with 40 possible channels for interference free operation at the scene.

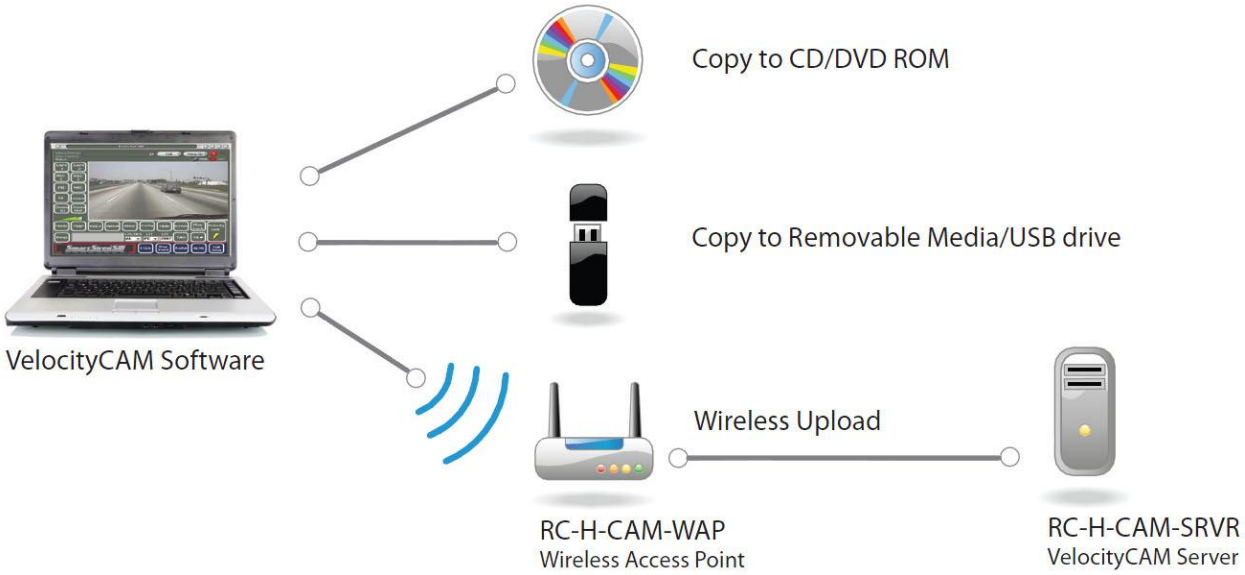
Wireless Microphone Model # RC-H-CAM-WM	
2.4GHz digital spread spectrum operation provides excellent audio quality and range.	Compact transmitter is only 2 inches long and includes an internal microphone.
Body pack transmitter includes rechargeable battery with 8 hour in-use time and 14 day standby.	

Optional Components – GPS Receiver

The GPS Receiver can be utilized in a variety of applications that require magnetic mounting. With a non-slip bottom and compact design, the GPS Receiver is completely self-contained and waterproof. It incorporates the latest SiRF Star III GPS chipset and an active patch antenna so you receive a high degree of GPS accuracy. This GPS Receiver is one of the most sensitive and accurate GPS receivers on the market today.

GPS Receiver Model # RC-H-AVL	
SiRF Star III High Performance GPS chipset.	High sensitivity (Tracking Sensitivity: -159 dBm).
Extremely fast TTFF (Time To First Fix) at low signal level.	Supports NMEA 0183 data protocol
Built-in SuperCap to reserve system data for rapid satellite acquisition.	Built-in patch antenna.
Super-cohesive magnetic for mounting on the car.	USB interface connection port.
Waterproof and non-slip on the bottom.	LED indicator for GPS fix or not fix.
WAAS ENGOS is supported.	

Data Retrieval & Storage



VelocityCAM Operation

This section describes the operation of the VelocityCAM system for use by officers and other front line responders. The steps outlined in this section will assist you in the location and operation of the VelocityCAM system and its robust lineup of features.

Login Screen

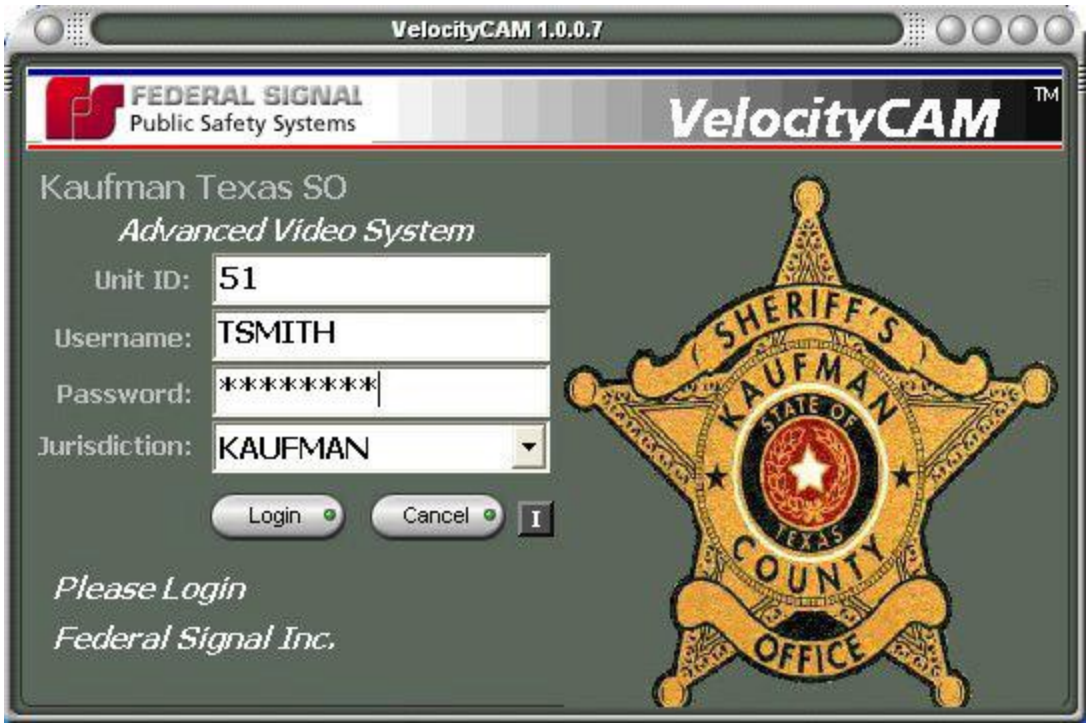
Users of the VelocityCAM Video and Data System are required to login to the software using a unique Unit ID, which in most cases, is their badge number or vehicle number. However, if your agency has purchased the optional communications package, which includes NCIC access, a unique username, password and jurisdiction are also required.

> **Note**: A Unit ID is always required for login, identifying the individual user through the video system. It should also be noted that several of VelocityCAM's features including NCIC access will not be available using this method. Additional login credentials will be required in order to access the National Crime Information Center (NCIC).

Requirements

- To be operable, the Velocity Message Switch must be turned on.
- A viable high-speed wireless connection able to carry video feeds.

> **Note:** The Velocity Message Switch is a server-based software responsible for routing messages between appropriate applications. The Velocity Message Switch, which runs on a Microsoft Windows Server platform, has connections to VelocityCAD (or third party Computer Aided Dispatch vendors), VelocityRMS (or other third party Records Management Systems), NCIC through specific state interfaces, and handles routing of mobile email, interactive chat messages and AVL data. As an example, when a VelocityCAM user sends a vehicle license plate request, the data is delivered to the Velocity Message Switch where the data is formatted to the correct state format and then routed to the state's mainframe computer system for processing. Once the license plate request has been processed, the message is reassembled and returned to the Velocity Message Switch, which in turn routes the query results back to the inquiring VelocityCAM client.



Steps to Login

Step 1: Enter the Unit ID (this is an agency defined identification number assigned to a specific user).

Note: Steps 2 - 4 are only required if the NCIC package is in use.

Step 2: Enter the officer's username (maximum of 12 characters).

Step 3: Enter the password associated with the username (maximum of 12 characters).

Step 4: Select a jurisdiction from the drop down menu.

Step 5: Click the **Login button**.

Note: After logging in to VelocityCAM, the system will automatically connect you to the cameras in the vehicle. VelocityCAM will also automatically detect if the Velocity Message Switch is in use. When it is, the username, password, and jurisdiction will be enabled. When it is not being used those fields will be disabled.

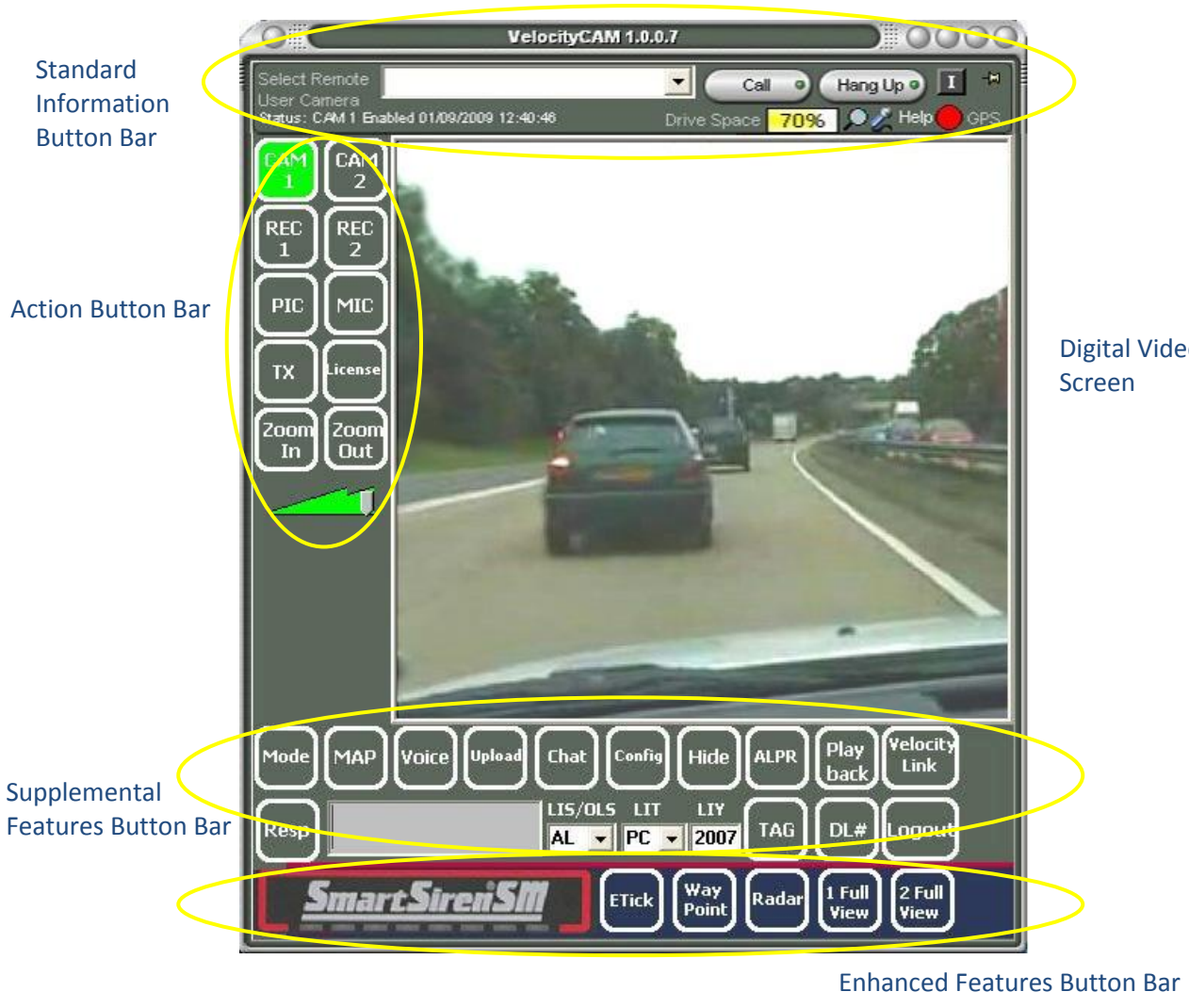
The Digital VidVCAM_SoftwareConfiguration.pdf

VCAM_UsersManual.pdf

VCAM_HardwareConfiguration.pdf

eo Control Panel

The Digital Video Control Panel has been designed in five main sections: (1) *Standard Information Toolbar*, (2) *Action Toolbar*, (3) *Digital Video Screen*, (4) *Supplemental Features Toolbar*, and the (5) *Enhanced Features Toolbar*.



Standard Information Button Bar

The Standard Information Toolbar contains buttons that perform specific actions for connecting and using the remote system features and details regarding system status, connections, and use.

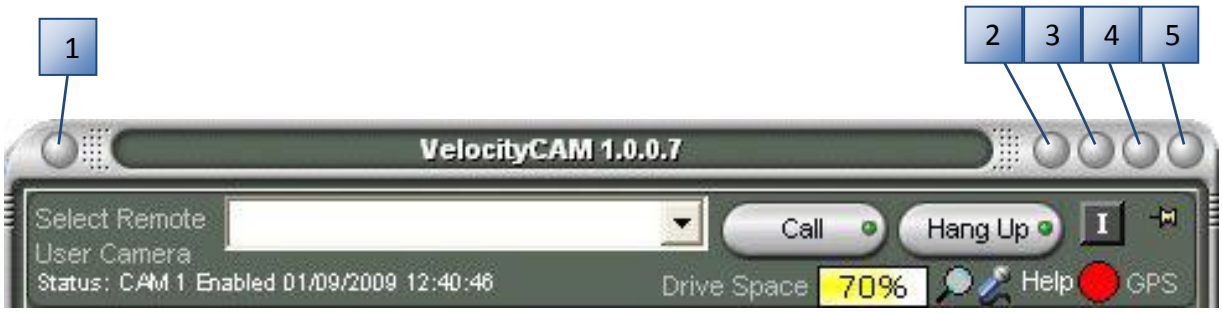
> **Note:** The Standard Information Toolbar shows "display-only" fields, meaning they cannot be modified. The following features and information are accessible from this toolbar.

- Remote User Camera Access
- Call/Hang Up buttons
- Connection Status Information
- Save Window Position
- System Status
- Camera Control Indicator
- Available Hard Drive Space Indicator
- System Microphone
- Program Help
- GPS Indicator
- Software Version Number

Standard Functions

Standard Windows® Controls:

A series of small gray buttons located at the top of the window are available to control the application.



Button 1: Clicking this button presents a drop down box that allows you to select **Minimize**, **Maximize** and **Close** window options.

Button 2: Reserved for future use.

Button 3: Minimizes the *VelocityCAM* window, placing it on your computer's taskbar. Clicking the window on the taskbar will restore it to its original size and place.

Button 4: Maximizes the *VelocityCAM* window, expanding it to fill your computer's screen.

Button 5: Closes the *VelocityCAM* window, thereby exiting the system.

"I" Connection Status Information button

The "I" Connection Status Information button displays the status and strength of the PCom Communications Manager application. The PCom application is automatically launched when VelocityCAM is started and the Velocity Message Switch is in use. The button will change colors based on signal/connection strength. Clicking this button will reset the connection.

Red = No connectivity

Yellow = Limited connectivity

Green = Connected

Save Window Position button

The Thumb Tack button saves the position of VelocityCAM windows on your workstation, allowing users to customize where they wish windows to be opened, sized and positioned each time you login.

To save window positions, follow these steps:

Step 1: Adjust and arrange the programs windows in the desired position.

Step 2: Click the **Thumb Tack button** to save the windows' placement.

System Status Line

The System Status Line indicates which camera is enabled as well as provides a current time and date stamp (MM/DD/YYYY HH:MM:SS).

Available Hard Drive Space Indicator

The Hard Drive Space Indicator monitors and displays the amount of available space for storage and recording on the Virtual DVR hard drive. Color coded for ease of viewing, the amount of hard drive space that's been used is displayed.

Camera Control Active Indicator

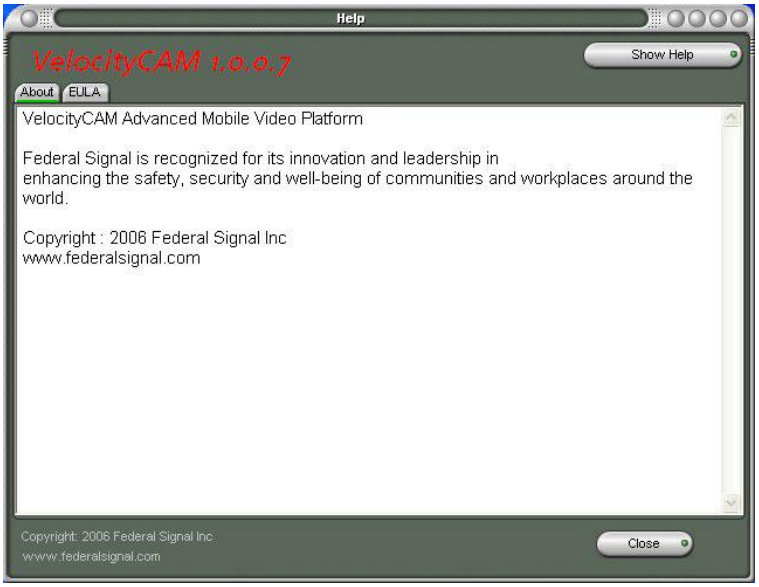
The Camera Control Active icon indicates whether Camera 1 and Camera 2 are active and able to be controlled with zoom in and zoom out functionality.

System Microphone Indicator

The System Microphone Indicator icon is only visible when the microphone hardware is connected.

Program Help Index

The Help button opens a separate dual tabbed window designed to display useful program details and information regarding the VelocityCAM program and its use. The documentation will be provided in both Adobe Acrobat and HTML format for user convenience. Information about the program, including version number and release date may also be found here under the About tab.


Help
VelocityCAM 1.0.0.7
Show Help
About
EULA
VelocityCAM Advanced Mobile Video Platform
Federal Signal is recognized for its innovation and leadership in enhancing the safety, security and well-being of communities and workplaces around the world.
Copyright : 2006 Federal Signal Inc
www.federalsignal.com
Copyright: 2006 Federal Signal Inc
www.federalsignal.com
Close

To access the built in program help index, follow these steps:

Step 1: Click the **Help button**, a separate *Help* window will open.

Step 2: Select the **Help tab** at the top of the window.

Step 3: Scroll through the enclosed document for helpful user information.

To view the information regarding the application, follow these steps:

Step 1: Click the **Help button**, a separate *Help* window will open.

Step 2: Select the **About tab** at the top of the window.

Step 3: Program details will be visible within the window.

GPS Indicator button

The GPS indicator shows the current status of the GPS connection. Clicking this button resets the connection.

- **Red** = No connectivity
- **Green** = GPS is connected

Remote Camera

Depending on your agency's configuration, a list of remote users actively connected to the Velocity Message Switch can be selected from a drop down menu. By selecting a remote user, their live camera feed will be displayed on a fly out window. The video will be played back at approximately 5 frames/sec, depending upon the network bandwidth.

The remote camera function is based upon user rights and ranking. Ranking, a feature of the Velocity Message Switch, allows the agency to configure a user by rank (ie: Patrolman, Sergeant, Lieutenant, Captain, Chief, etc.). Then the user can remotely view the cameras of any user that has a ranking equal to or below his/her ranking.

> **For Example:** A patrolman has the ability to view another patrolman's remote camera, but he cannot see the Lieutenant's remote camera. However, a Lieutenant can view a patrolman, sergeant and other lieutenant's remote cameras, but not the chief's.

Establishing a Remote User Connection

To view a remote user camera, follow these steps:

Step 1: Click the arrow on the *Select Remote User Camera* drop down menu.

Step 2: Select the remote user's camera that you wish to view by clicking on the name from the drop down list.

Step 3: Click the **Call button**.

To disconnect from a remote user's camera:

Click the **Hang Up button**.

Front and Rear Cameras (CAM 1 & CAM 2)

Camera 1

Camera 1, by default, is automatically enabled upon logging into the VelocityCAM application. By clicking on the CAM1 button, the button will be illuminated green and the camera feed will be displayed in the Digital Video Screen.

> NOTE: Camera 1 and 2 can be viewed and recorded simultaneously; a separate fly out screen will open to display the video from Camera 2.

To turn on CAM 1:

Click the **CAM 1** button to display the video feed for *Camera 1* in the Display Video Screen.

Camera 2

The Camera 2 action button controls the infrared rear seat camera. Upon clicking on this button, the action button will be illuminated green and the rear seat camera will become active. While the video feed is not automatically displayed, the camera is still recording. To view the actual camera feed for Camera 2, click the CAM 2 action button a second time. This feature has been added to allow the user to hide the video feed from the passenger.

To turn on CAM 2, follow these steps:

Step 1: Click the **CAM 2 button** to begin recording from *Camera 2*.

Step 2: Click the **CAM 2 button** again to display the video feed from *Camera 2* in a separate fly out window.

Step 3: To hide the fly out window click the **CAM 2 button** again.

Recording

Rec 1 & Rec 2

VelocityCAM comes equipped with two cameras which can record either independently or simultaneously by using the REC 1 and REC 2 buttons. When a camera is recording, specific information can be overlaid on the video, depending upon your agency's configuration. Information such as a date and time stamp, CAD call number, GPS latitude, longitude and speed, and the radar speed are just a few of the pieces of information available for overlay. Additionally, the selected camera will be stamped with a hidden watermark on the recorded video along with both the Federal Signal and VelocityCAM logos for authentication purposes.

> NOTE: The cameras are always enabled, but not actively recording unless Rec 1 or Rec 2 are selected. The Pre-Record feature will allow you to capture anywhere from 30 seconds to 120 seconds of ghost recording time starting once Rec 1 or Rec 2 are selected, based on your system's configuration.
>
> If the camera is recording and the microphone is running, it cannot be turned off from the body microphone; it can only be turned off from the vehicle.

To record on Camera 1:

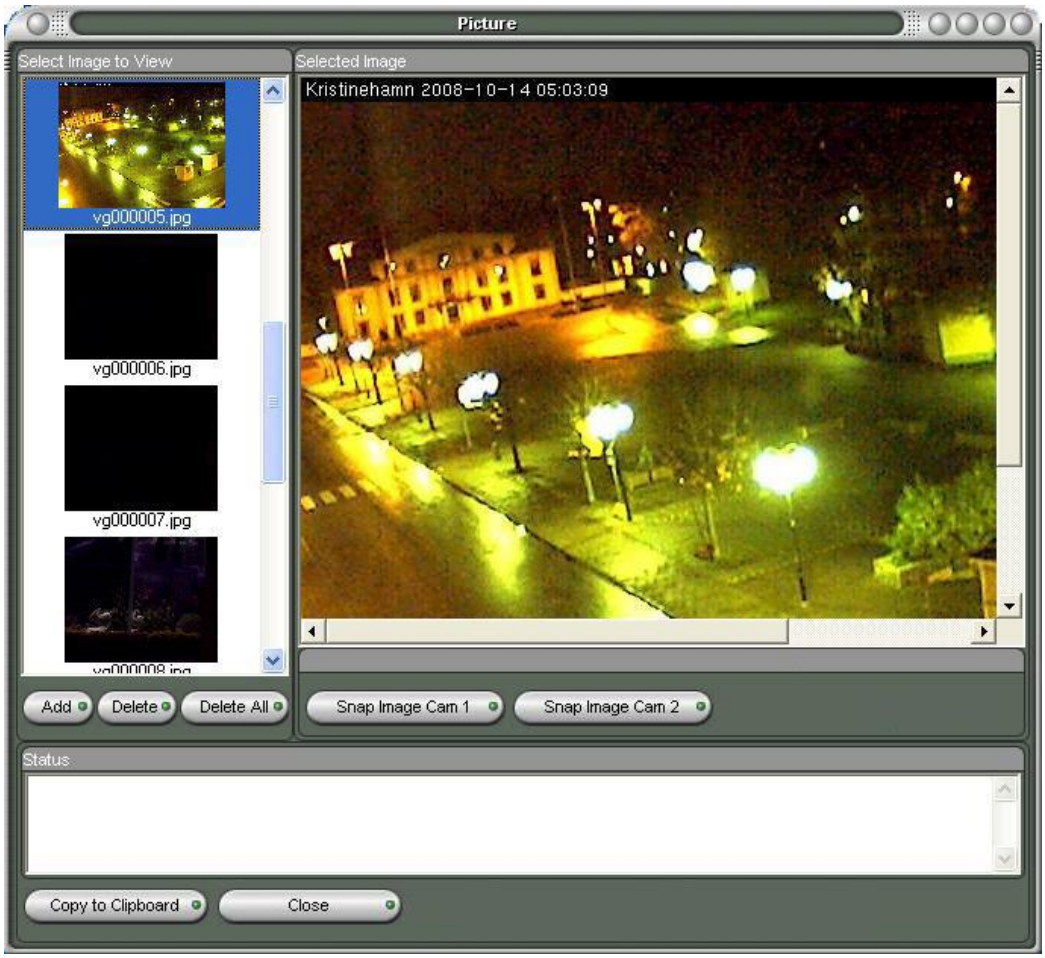
Click the **Rec 1 button**.

To record on Camera 2:

Click the **Rec 2 button**.

Picture

The Picture feature is designed to allow the user to capture and view still photos of videos and images. Photos can be taken at anytime from either the front or rear camera and stored locally on the Virtual DVR.



Capturing & Viewing Pictures

To view a still photo, follow these steps:

Step 1: Click on the **PIC button** to open the *Picture* window.

Step 2: Select the desired photo from the *Image to View* panel located on the left side of the window.

To capture a still photo, follow these steps:

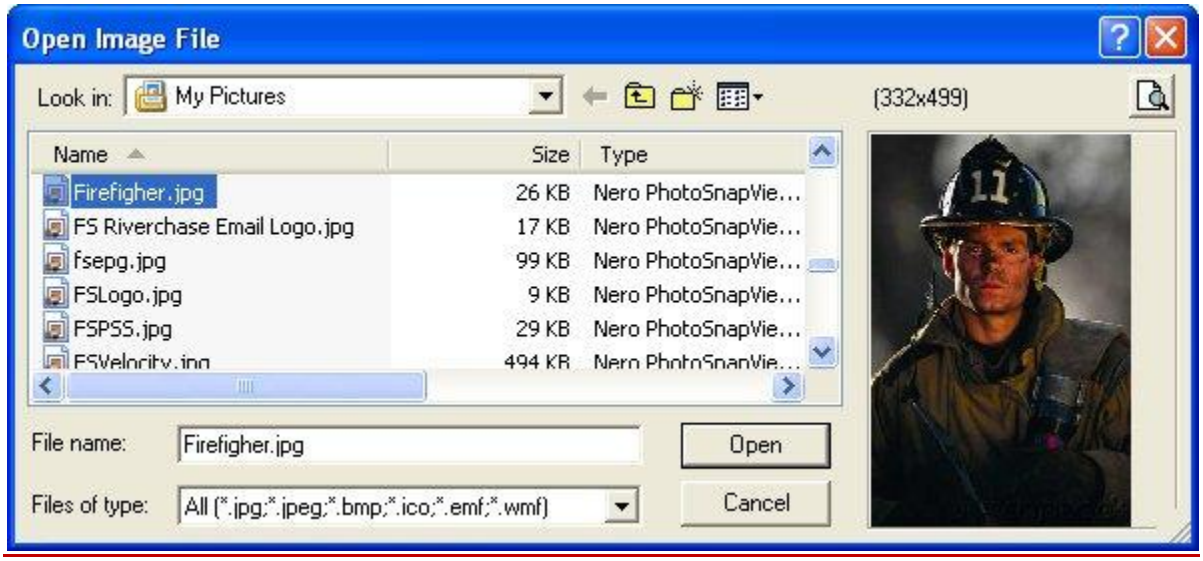
Step 1: Click on the **PIC button** to open the *Picture* window.

Step 2: Click the **Snap Image Cam 1 button** or **Snap Image Cam 2 button** to take a snapshot of the video feed on the respective camera.

To import an image from another directory, follow these steps:

Step 1: Click on the **PIC button** to open the *Picture* window.

Step 2: Click the **Add button** to display the *Open Image File* window.

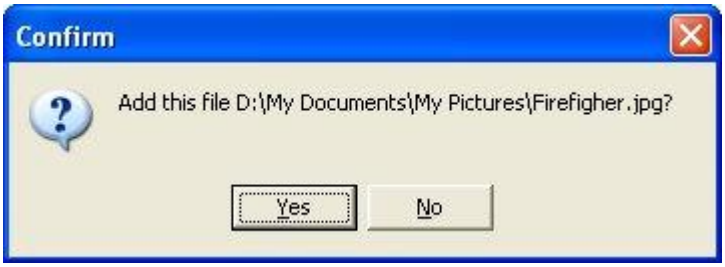


Step 3: Locate the folder that the desired image is stored in by using the drop-down *Look in* field.

Step 4: Select the desired photo.

Step 5: Either double-click the desired photo or click the **Open button** to select the image.

Step 6: Select the **Yes button** when asked to confirm the addition of the photo.



To delete a single still photo, follow these steps:

Step 1: Select the desired photo to be deleted from the *Select Image to View* panel.

Step 2: Click the **Delete button**.

Step 3: Click the **Yes button** to confirm the correct photo is being deleted.

To delete all still photos, follow these steps:

Step 1: Select and highlight at least one or all of the photos to be deleted from the *Select Image to View* panel.

Step 2: Click the **Delete All button,** which will highlight and remove all photos in the *Select Image to View* panel.

Step 3: Click the **Yes button** to confirm that all photos are being deleted.

Transmit – "Watch Over Me"

The Watch Over Me function allows you to transmit your video feed to other VelocityCAM users such as a dispatcher or Watch Commander. This feature is extremely helpful when the user knows that he or she might be involved in a dangerous situation and wants to have the security to know someone else is watching what is happening.

Using Watch Over Me

To transmit a video feed to another user, follow these steps:

Step 1: Click the **TX button** to open the *TX Workstation* window.

Step 2: Select the desired remote workstation from the list of available workstations.

Step 3: Click the **Send button**.

To discontinue the transmission of a video feed:

Click the **TX button**.

License

The License Plate function aids law enforcement officers who may be making a traffic stop by automatically zooming the camera into the vehicle's license plate. The license plate information is recorded and the plate is displayed in the Digital Video Screen for the officer to view. The definable zoom feature can is based upon three (3) different angles and can be configured to zoom in and out over a period of time as defined by the agency.

Zooming In on a License Plate

To zoom into the license plate:

Click the **License button**.

Zoom In/Zoom Out

The Zoom In and Zoom Out features function as a typical digital camera, allowing the user to zoom the camera into a target or zoom out; depending upon what button is pressed.

Using the Standard Zoom feature

To Zoom into a target:

Click the **Zoom In button**.

To Zoom out:

Click the **Zoom Out button**.

Mode

One of the best features of the VelocityCAM Video and Data System is the ability to search through previously recorded videos. To make searches easier, videos can be tagged with a specific mode identifier, such as DUI or Red Light violation. The mode function allows you to assign specific, predefined modes to your video. Additionally, indicators such as case number, CAD incident number and notes can be assigned to the video.

A separate window opens to allow you to select a mode to classify the video; this all has to be done while it's recording.

The case # is always issued by the CAD dispatcher. However, if using MDS, the Case # will be added and then synced up with the Incident # that is entered in VelocityCAD.

Setting Modes to Video

To assign a mode to a new video, follow these steps:

Step 1: Click on the **Mode button** to display the *Mode Screen* window.

Step 2: Click the desired mode button, or buttons.

Step 3: Enter the optional case number in the *Case #* field.

Step 4: Enter the optional CAD incident number in the *CAD Incident #* field.

Note: If VelocityCAD is being utilized, the CAD Incident Number will automatically be added.

Step 5: Enter any additional notes that you wish to attach to the video.

Step 6: Enter a video key name for easier searching.

Step 7: Click the **Close button**.

Permanently Storing Video

To store a video forever, follow these steps:

Step 1: Follow the steps outlined above.

Step 2: Click the **Store Forever button**.

Step 3: Click the **Close button**.

Clearing Video Modes

To clear modes already assigned to the video:

Click the **Clear All Modes button**.

Map

Integrated mapping is an optional feature of the VelocityCAM Video and Data System. Utilizing the ESRI mapping platform, Automated Vehicle Location (AVL) and fleet tracking options are available to the user. Additional functionality such as Follow-Me, Rotate and Immediate Waypoint Recognition are optional features of VelocityCAM.

> Note: Some mapping features require an optional Message Switch and AVL module to be purchased.

Predefining Zooms

The Zoom In and Zoom Out are predefined and holds the degree of zoom and the mileage given the zoom radius. The Zoom # buttons zoom in to an area that is predefined in the map configuration.

To utilize predefined zoom buttons:

Click on the desired predefined zoom button (Zoom 1 through Zoom 5).

To zoom into a location:

Click on the **Zoom In button** or hold the left-mouse button down and draw a radius around an area on the map.

To zoom out:

Click on the **Zoom Out button**.

To find a specific address on the map, follow these steps:

Lookup Address
Enter the address or place name which is the object of your search. Separate street address, city, state and ZIP code with commas.
OK
Cancel
19938 Bonnie Ridge Way,,CA,95070

Step 1: Click on the **Find Addr button** to display the address lookup window.

Step 2: Enter the desired address as location, city, state, zip code.

Step 3: Press the **OK button**.

Follow

This feature keeps the user (vehicle) centered in the map wherever you go. It will zoom out to keep you positioned in the center as you travel.

To enable the Follow Me function:

Click the **Follow button**.
Note: To disable the Follow Me function, click on the Follow button again.

Rotate

Rotates the map so that it always appears that you are heading straight up the screen. It gives a "heads up position."

To enable the Rotate function:

Click on the **Rotate button**.
Note: To disable the Rotate function, click on the **Rotate button** again.

Snap To

Snaps the vehicle to the nearest or closest available street.

To enable the Snap feature:

Click on the **Snap button**.
Note: To disable the Snap feature, click on the Snap button again.

Validating Position

Indicator turns green if the GPS is giving you valid data.

Deleting Way Points

Clears all way-points from the on-screen map. However, the way-points are still stored in the video.

Legend

The following default icons are used to distinguish different locations within the map:

Default Map Icon Legend	Description
Cemetery	
Church	
City Hall or County Building	

Hospitals	
Interstate	
Major Street	
Minor Street	
Railroad	
River or Stream	
School	

Hidden Menu Options

The following options are available as right-mouse click menu options within the map section:

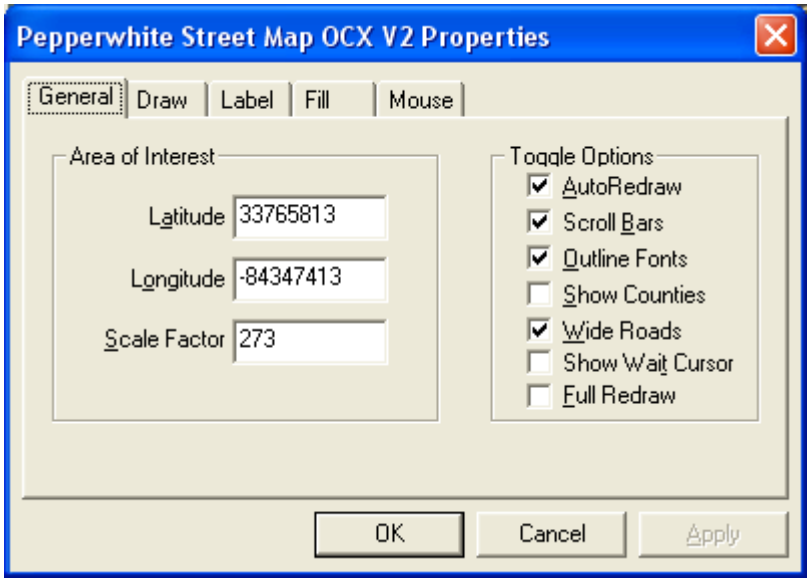
Right-Mouse Click Options	Description
UnZoom	Undoes the last issued zoom command
Zoom In	Zooms into the map at the preset zoom interval
Zoom Out	Zooms out of the map at the preset zoom interval
View State	Zooms the map to view the state level
View County	Zooms the map to view the county level
Configure Map	Opens up a window that contains map configuration options
Lookup Address	Displays a window and field to submit a map query
Redraw Current Map	Refresh map view
Print Map	Sends the current view of the map to the printer
Copy to Clipboard	Copies the current map view for use in another application

Map Configuration

Opens a separate window and allows you to configure the Zoom # buttons, zoom radius, etc.

Warning: Map data has not been verified as accurate.

General Options

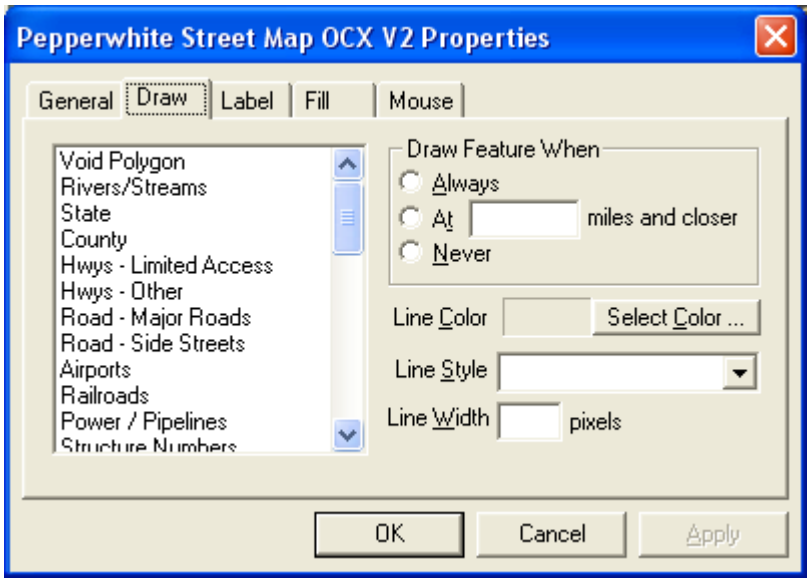


The General options which are available for configuring the map allow you to customize your settings for use. These options include:

General Options	Description
Area of Interest	The currently defined position on the map.
Latitude	The East-to-West degreed coordinate used to specify relative planetary location in the Area of Interest.
Longitude	The North-to-South degreed coordinate used to specify relative planetary location in the Area of Interest.
Scale Factor	Used to define the ratio of a single unit of distance on the map to the equivalent distance on the ground.
Toggle Options	A list of alternate keystroke options.
Auto Redraw	Refresh the map drawing.
Scroll Bars	Defines whether the scrollbar widget is enabled for controlling display and visibility of different areas of the map within the window.
Outline Fonts	Defines whether an outline stroke will be applied around text to aid in visibility.
Show Counties	Defines whether the counties and their borders will be displayed.

Wide Roads	Used to specify a large or busy roadway.
Show Wait Cursor	Enables the hour glass "wait" icon, used to alert the user that the computer is processing data.
Full Redraw	Refresh the map drawing.

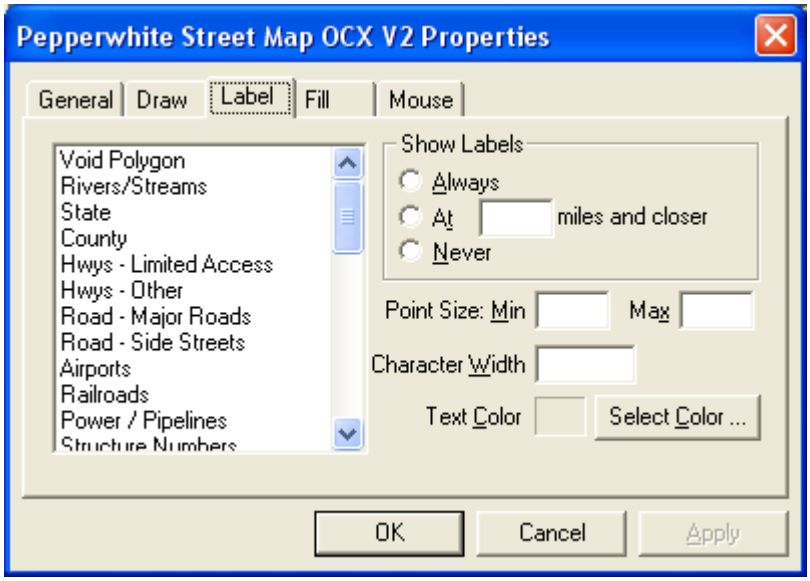
Draw Options



The Draw options which are available for configuring the map allow you to customize your settings for use. These options include:

Draw Options	Description
List of geographic locations/structures	The available drawing categories/icons that can be designated on the map.
Draw Feature When	Used to define when and at what distance a selected icon is made visible on the map.
Line Color	Allows the color of map lines to be selected or customized.
Line Style	Allows the style of map lines to be defined.
Line Width	Allows the width of map lines to be defined.

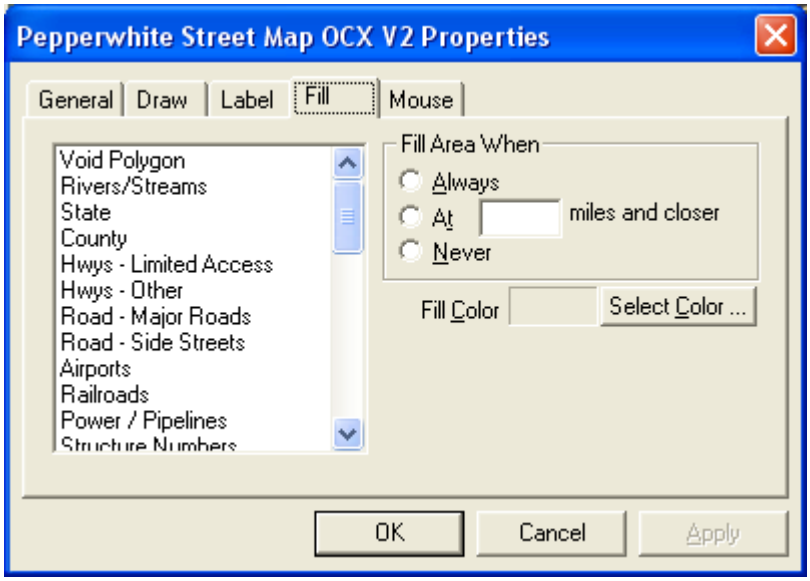
Label Options



The Label options which are available for configuring the map allow you to customize your settings for use. These options include:

Label Options	Description
List of geographic locations/structures	The available label categories that can be designated on the map.
Show Labels	Used to define when and at what distance a selected label is made visible on the map.
Point Size	The size of the icon "point" associated with the label.
Character Width	Defines the selected width of the characters used within the labels displayed on the map.
Text Color	Allows the color of text to be selected or customized.

Fill Options



The Fill options which are available for configuring the map allow you to customize your settings for use. These options include:

Fill Options	Description
List of geographic locations/structures	The available fill categories that can be designated on the map.
Fill Area When	Used to define when and at what distance a selected background fill is used on the map.
Fill Color	Allows the color of background fill to be selected or customized.

Mouse Options

The Mouse options which are available for configuring the map allow you to customize your settings for use. These options include:

Mouse Options	Description
Left Button	Defines the desired functionality of the left mouse button.
Middle Button	Defines the desired functionality of the center mouse button or scroll wheel.
Right Button	Defines the desired functionality of the right mouse button.

Voice Commands

The VelocityCAM Video and Data System utilizes the power of voice to perform specific operations, allowing the user to concentrate on activities. Commands such as Quick Tag allow the user to speak vehicle license plate numbers to the integrated NCIC module. Other commands like "Camera One On" or "Take a Picture" become invaluable tools for users.

Note: The **Voice button** needs to be held down to give it commands.

Available Voice Command Options

Available Voice Commands	Description
Close	Closes the application
Exit	Exits the program
Goodbye	Exits the program
Stop Speaking	Silences the voice command narrator
Hush	Silences the voice command narrator
Be Quiet	Silences the voice command narrator
Quiet	Silences the voice command narrator
Shut Up	Silences the voice command narrator
What time is it	Instructs the narrator to notify the user of the time
What day Is It	Instructs the narrator to notify the user of the day and date
License type	Type of license plate such as PC or TK
State	License plate state
Help	Help screen
Quick tag	Command to run a license plate #
Run tag	Command to run a license plate #
Back up	Command to go backward – delete
Alpha	Phonetic alphabet for letter "A"
Bravo	Phonetic alphabet for letter "B"
Charlie	Phonetic alphabet for letter "C"
Delta	Phonetic alphabet for letter "D"
Echo	Phonetic alphabet for letter "E"
Foxtrot	Phonetic alphabet for letter "F"
Golf	Phonetic alphabet for letter "G"
Hotel	Phonetic alphabet for letter "H"
India	Phonetic alphabet for letter "I"
Juliett	Phonetic alphabet for letter "J"
Kilo	Phonetic alphabet for letter "K"
Lima	Phonetic alphabet for letter "L"
Mike	Phonetic alphabet for letter "M"
November	Phonetic alphabet for letter "N"
Oscar	Phonetic alphabet for letter "O"
Papa	Phonetic alphabet for letter "P"
Quebec	Phonetic alphabet for letter "Q"
Romeo	Phonetic alphabet for letter "R"
Sierra	Phonetic alphabet for letter "S"
Tango	Phonetic alphabet for letter "T"
Uniform	Phonetic alphabet for letter "U"
Victor	Phonetic alphabet for letter "V"
Wiskey	Phonetic alphabet for letter "W"
X-Ray	Phonetic alphabet for letter "X"
Yankee	Phonetic alphabet for letter "Y"

Zulu	Phonetic alphabet for letter "Z"
Zero	0
One	1
Two	2
Three	3
Four	4
Five	5
Six	6
Seven	7
Eight	8
Nine	9
Niner	9
Clear tag	Command to clear license plate field
Cad screen	Command to display CAD screen
Query screen	Command to display NCIC query
N C I C screen	Command to display NCIC results screen
Email screen	Command to display email screen
Chat screen	Command to display chat screen
R M S screen	Command to display RMS screen
Map screen	Command to display map screen
Dictation on	Enable dictation
Alabama	The state of Alabama
Alaska	The state of Alaska
Arizona	The state of Arizona
Arkansas	The state of Arkansas
California	The state of California
Colorado	The state of Colorado
Connecticut	The state of Connecticut
Delaware	The state of Delaware
Washington DC	The District of Columbia
Florida	The state of Florida
Georgia	The state of Georgia
Hawaii	The state of Hawaii
Idaho	The state of Idaho
Illinois	The state of Illinois
Indiana	The state of Indiana
Iowa	The state of Iowa
Kansas	The state of Kansas
Kentucky	The state of Kentucky
Louisiana	The state of Louisiana
Maine	The state of Maine
Maryland	The state of Maryland
Massachusetts	The state of Massachusetts
Michigan	The state of Michigan

Minnesota	The state of Minnesota
Mississippi	The state of Mississippi
Missouri	The state of Missouri
Montana	The state of Montana
Nebraska	The state of Nebraska
Nevada	The state of Nevada
New Hampshire	The state of New Hampshire
New Jersey	The state of New Jersey
New Mexico	The state of New Mexico
New York	The state of New York
North Carolina	The state of North Carolina
North Dakota	The state of North Dakota
Ohio	The state of Ohio
Oklahoma	The state of Oklahoma
Oregon	The state of Oregon
Pennsylvania	The state of Pennsylvania
Rhode Island	The state of Rhode Island
South Dakota	The state of South Dakota
Tennessee	The state of Tennessee
Texas	The state of Texas
Utah	The state of Utah
Vermont	The state of Vermont
Virginia	The state of Virginia
Washington	The state of Washington
West Virginia	The state of West Virginia
Wisconsin	The state of Wisconsin
Wyoming	The state of Wyoming
Camera one on	Command to turn Camera 1 on
Camera one off	Command to turn Camera 1 off
Camera two on	Command to turn Camera 2 on
Camera two off	Command to turn Camera 2 off
Camera one recording on	Command to start Camera 1 recording
Camera one recording off	Command to stop Camera 1 recording
Camera two recording on	Command to start Camera 2 recording
Camera two recording off	Command to stop Camera 2 recording
Take a picture	Command to snap a still photo
Microphone on	Command to turn microphone on
Microphone off	Command to turn microphone off
Call remote camera	Command to call a remote camera
Hang up remote camera	Command to hang up a remote call
Zoom license	Command to zoom in on a license plate
Zoom in	Command to zoom in on map
Zoom out	Command to zoon out of map
Close picture screen	Command to close picture window

Upload screen	Command to display upload window
Close upload screen	Command to close upload window
Show full screen	Command to display VCAM full screen
Hide full screen	Command to hide VCAM in full screen
Playback screen	Command to display playback window
Close playback screen	Command to close playback window
Velocity link screen	Command to display Velocity Link window
Close velocity link screen	Command to close Velocity Link window
E-Ticket screen	Command to display E-Ticket application
Add way point	Command to add a new waypoint
Radar screen	Command to display radar window
Close radar screen	Command to close radar window
A L P R screen	Command to display ALPR window

Note: The built in audible voice response feature may be disabled at anytime by…..

Issuing a Voice Command

To issue a voice command, follow these steps:

Step 1: Click and hold down the **Voice button** on the *Feature Toolbar*.

Step 2: Speak the desired command into the microphone.

Step 3: Release the **Voice button**. The command will be performed, indicated by an audible voice recognition alert.

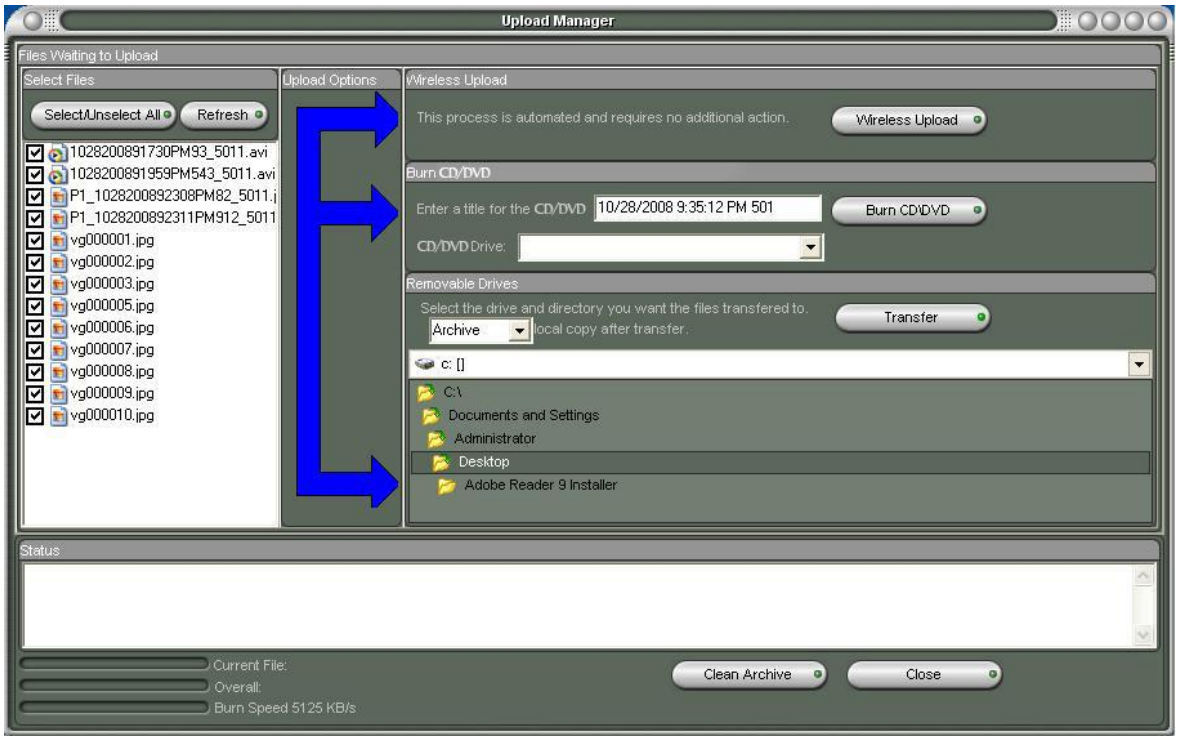
Step 4: Repeat the above steps to issue other commands.

Upload

The Upload Manager gives users the ability to upload images and video to a centralized server, burn them to CD/DVD media or save them to removable drives, depending upon your agency's configuration and the rights assigned to you by the System Administrator.

Wireless Upload

Images and video can be uploaded to a predefined server location using 802.11 technologies and laptop authentication. Typically, when the vehicle is in range of a wireless access point images and video will be uploaded using the wireless technology.



Burning Images & Video to CD/DVD

Images and video can be burned to a CD or DVD provided your workstation has a DVD-RW +/- drive or CDRW drive. In order to burn media to a CD/DVD drive, the user must be granted security rights to do so.

To burn image and video to CD/DVD media, follow these steps:

Step 1: Select the desired images and videos to be uploaded by clicking on the file located in the Select Files panel. Files with checkmarks will be uploaded, while those without checkmarks will not.

Step 2: Enter a title for the CD/DVD in the *CD/DVD* field.

Step 3: Select a CD/DVD drive from the *CD/DVD* drive field.

Step 4: Click the **Burn CD/DVD button**.

Removable Drives

Images and video can be saved to a removable drive such as a thumb drive or external hard drive provided the user has been granted the security rights to do so.

To save image and video to a removable drive, follow these steps:

Step 1: Select the desired images and videos to be uploaded by clicking on the file located in the *Select Files* panel. Files with checkmarks will be uploaded, while those without checkmarks will not.

Step 2: Select the desired drive and directory from the *Removable Drive* drop-down menu.

Step 3: Click the **Transfer button**.

Wireless Upload of Images, Video & Data

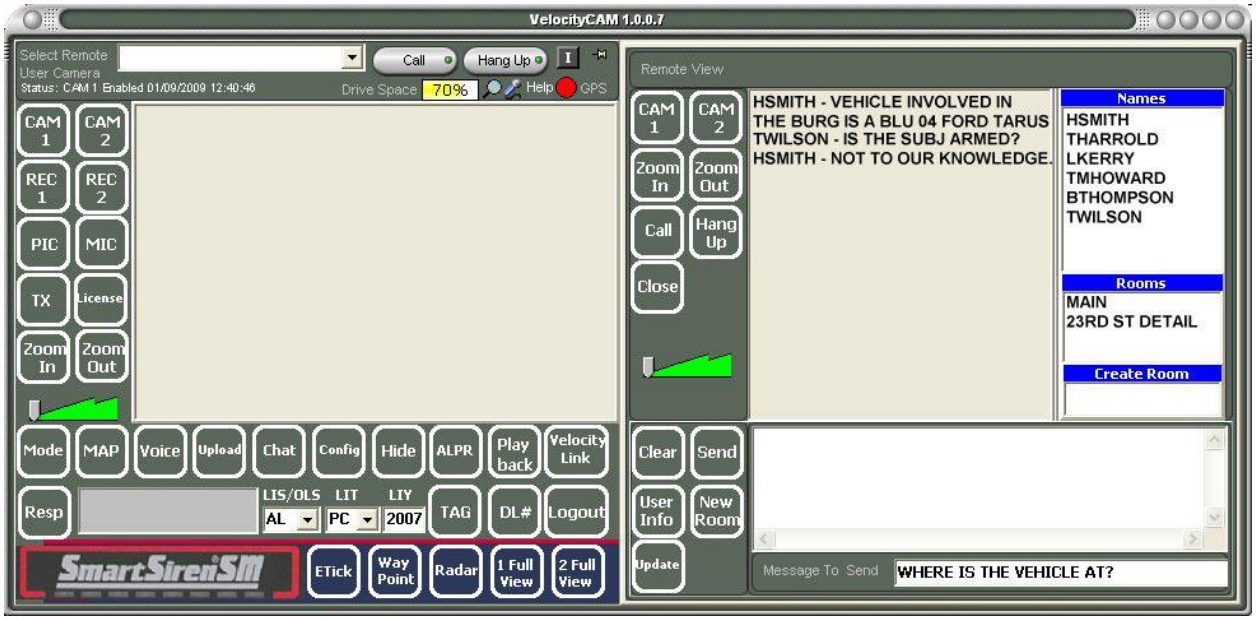
To upload image and video via wireless technology, follow these steps:

Step 1: Select the desired images and videos to be uploaded by clicking on the file located in the *Select Files* panel. Files with checkmarks will be uploaded, while those without checkmarks will not.

Step 2: Click the **Wireless Upload button**.

Chat

The Chat feature is a unique feature to VelocityCAM and allows users to instantly send or receive messages from other VelocityCAM, VelocityCAD and VelocityMDS users. The Chat feature allows users to create individual rooms for special operations, send messages to a single or group of users and look up information such as telephone numbers of specific users.



Using Chat

To use the Chat feature:

Click on the **Chat button** to display the *Chat* window.

Sending a Message

To send a chat message, follow these steps:

Step 1: Select a user name from the *Names* field noting that multiple names may be selected by using the **CTRL** and **Shift** keys.

Step 2: Type your desired message in the *Message To Send* field.

Step 3: Press the **Enter** key on your keyboard or click the **Send button**.

Creating a New Room

To create a room, follow these steps:

Step 1: Enter a room name in the *Create Room* field.

Step 2: Press the **Enter** key on your keyboard or click the **Create Room button**.
Note: A room will automatically be deleted when the last user exits the room.

Entering an Existing Room

To enter a room:

Double-click on the desired room in the *Rooms* field.

Viewing a User's Info

To view user information, follow these steps:

Step 1: Select a user from the *Names* list by highlighting the desired user.

Step 2: Click the **User Info button**.

Clearing a Message

To clear the message window:

Click the **Clear button**.

Refreshing Chat Lists

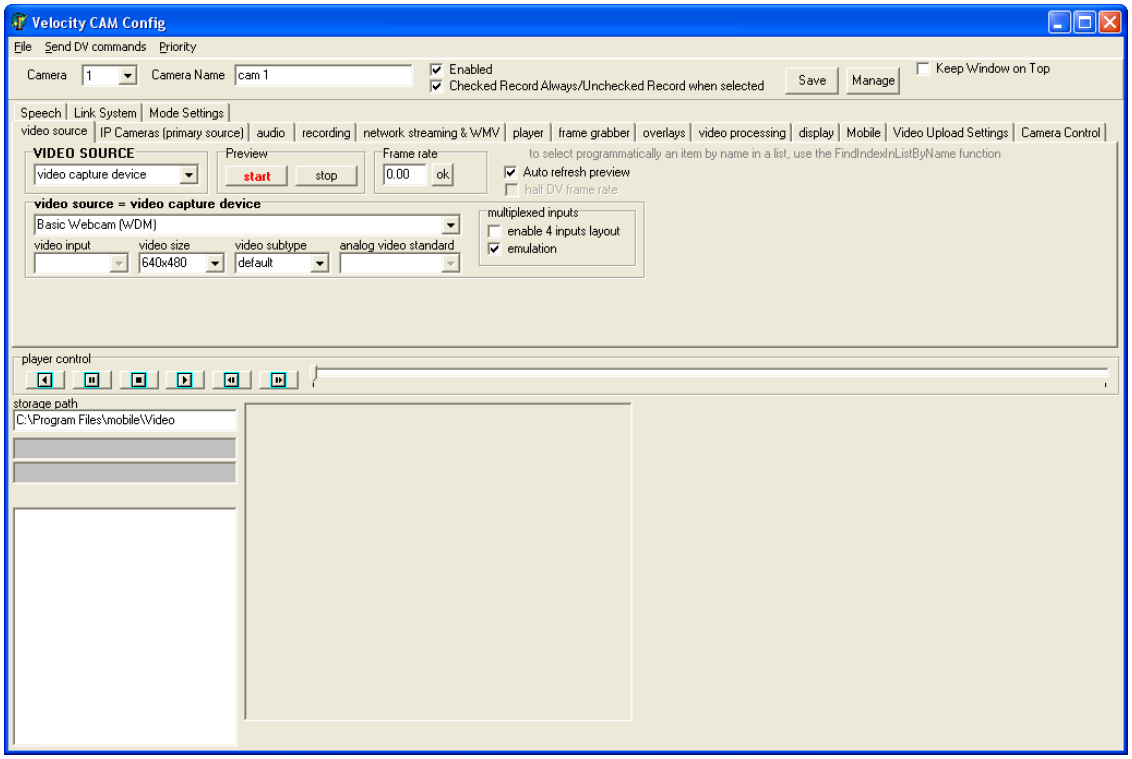
To manually refresh the chat user/chat room lists:

Click the **Update button**.

Enhanced Configuration Module

VelocityCAM can be configured with hundreds of different options utilizing the Enhanced Configuration Module. Based upon specific user security rights, the Enhanced Configuration Module can be accessed by clicking on the Config button and entering the correct password.

> For additional configuration options and detailed information on this module, see the VelocityCAM Enhanced Configurations Manual.


Velocity CAM Config
File Send DV commands Priority
Camera 1 Camera Name cam 1
Enabled
Checked Record Always/Unchecked Record when selected
Save Manage
Keep Window on Top
Speech Link System Mode Settings
video source IP Cameras (primary source) audio recording network streaming & WMV player frame grabber overlays video processing display Mobile Video Upload Settings Camera Control
VIDEO SOURCE
video capture device
Preview
start stop
Frame rate
0.00 ok
to select programmatically an item by name in a list, use the FindIndexInListByName function
Auto refresh preview
half DV frame rate
video source = video capture device
Basic Webcam (WDM)
video input video size video subtype analog video standard
640x480 default
multiplexed inputs
enable 4 inputs layout
emulation
player control
storage path
C:\Program Files\mobile\Video

Please Note: There are several hundred unique configuration options that can be set depending upon your specific hardware and available system options. Please refer to the VelocityCAM Configurations Manager manual for more information.

Hide

The VelocityCAM Digital Video System can be hidden from passengers in the vehicle by clicking on the Hide button. While the application may be hidden, it will still continue to record and function normally.

Automated License Plate Recognition (ALPR)

Reserved for future use.

Playback

The VelocityCAM Playback feature allows users to playback video captured earlier in time. Functioning like a standard DVD, you can play, pause, stop, fast forward and rewind video. Unlike most standard DVD players, with VelocityCAM's Playback feature, you can adjust both the normal playback speed, the fast-forward and rewind speed ratios.

Replaying Videos

To play a previously captured video, follow these steps:

Step 1: Click on the **Playback button** to display the *Playback* window.

Step 2: Select the desired video from the list of videos on the left side of the window.

Step 3: Click the **Play button**.

Using Slow Motion

To play a previously recorded video in slow motion, follow these steps:

Step 1: Click on the **Playback button** to display the *Playback* window.

Step 2: Select a video from the list of videos on the left side of the window.

Step 3: Click the **Play button**.

Step 4: Click on the **Slow button**.

Stopping Videos

To stop a video from playing:

Click on the **Stop button**.

Fast-Forwarding Videos

To fast-forward through a video:

Click the **FF button**.

Rewinding Videos

To rewind a video:

Click on the **REW button**.

Adjusting Video Speeds

To adjust the normal play speed ratio:

Step 1: Use the spin-edit control field to adjust the playback speed. The up arrow increases the speed of playback, while the down arrow decreases it.

Step 2: Select the desired video from the list of videos on the left side of the window.

Step 3: Click the **Play button**.

To adjust the fast-forward/rewind speed ratio:

Use the spin-edit control field to adjust the *FF/Rewind* speed. The up arrow increases the speed of playback, while the down arrow decreases it.

Velocity Link

VelocityLink is an integrated web browser similar to that of Microsoft's Internet Explorer. However, VelocityLink allows the agency to control which URLs can be accessed by its end-users.

Using the VelocityLink Browser

To access VelocityLink:

Click on the **VelocityLink button** to open the *VelocityLink Browser*.

Web Browser
File View Go Help
Back Forward Stop Refresh Close Weather
Links VelocityCAM Federal Signal Most Wanted Sex Offenders
Address http://www.federalsignal.com/
FEDERAL SIGNAL
Advancing security and well-being.
Search
Home Products Investors News About Us Contact Us
Helping protect officers and citizens
Law enforcement systems
POLICE
Federal Signal Corporation (NYSE: FSS) enhances the safety, security and well-being of communities and workplaces around the world. Founded in 1901, Federal Signal is a leading global designer and manufacturer of products and total solutions that serve municipal, governmental, industrial and institutional customers.
BREAKING NEWS
December 04, 2008
Federal Signal appoints new chief
http://www.federalsignal.com/

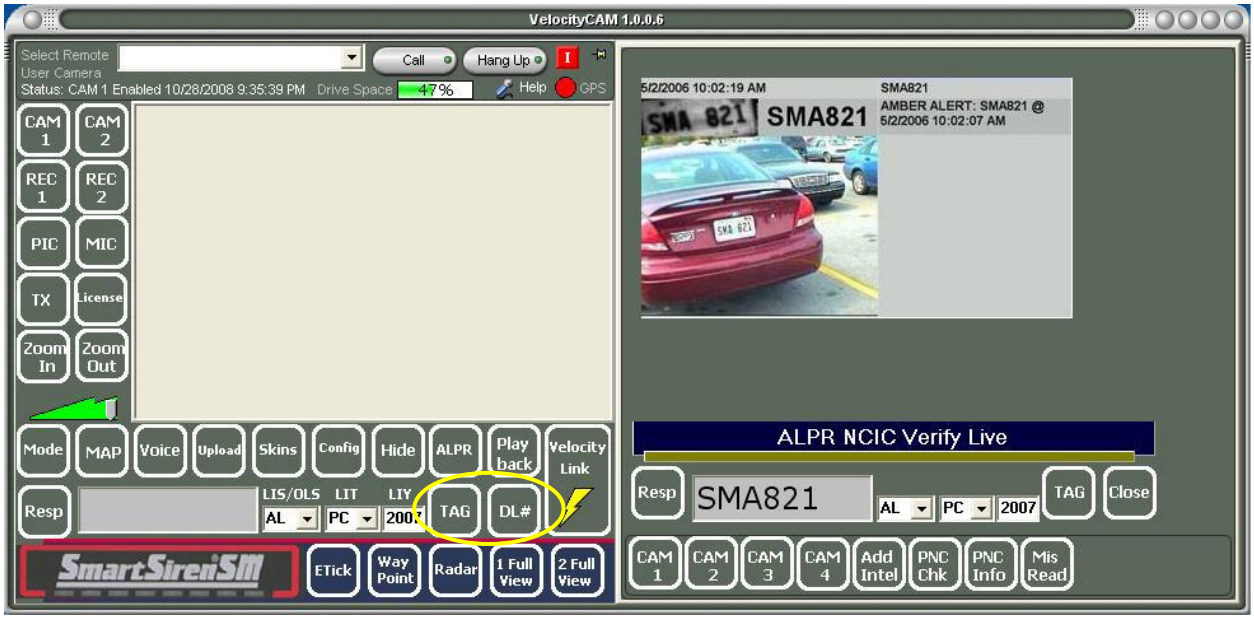
VelocityLink Browser features	Description
File Menu	Contains the option to exit the VelocityLink Web Browser
View Menu	Contains options to view toolbars, status bars, etc.
Go Menu	Contains navigation options such as Back and Forward
Help Menu	Contains help file options.
Back Button	Navigates back to the last webpage visited.
Forward Button	Navigates forward to an already loaded webpage.
Stop Button	Stops the loading of a webpage.
Refresh Button	Reloads the current webpage.
Close Button	Closes the VelocityLink browser window.
Weather Button	Displays the current weather radar map for your area.
Links Buttons	Are standard URL links to specific websites.
Address Bar	The field used to enter new webpage addresses (URLs).

Response

The Response function, when used in conjunction with the Velocity Message Switch, allows users to access local, state and NCIC files to process vehicle license plate and driver's license inquiries. VelocityCAM also offers a telescoping query feature which automatically runs the registered owner's driver license information based from a license plate inquiry.

Auto scroll will automatically move up with a telescoping inquiry and it will pull up multiple returns on a tag number (configurable).

Response Detail Fields	Description
License state	State the license plate is issued in.
License type	Type of license plate such as PC or TK.
License year	The current year of the license plate.
Tag number	The button used to process license plate inquiries.
Driver's license	The button used to process driver's license inquiries.



Submitting a Response Query

To view the results of a vehicle or driver's license inquiry, follow these steps:

Step 1: Enter a vehicle license plate number or driver's license number in the *Quick Tag* field.

Step 2: Select the appropriate state from the drop down *LIS/OLS* field.

Step 3: Select the appropriate license type (if running a license plate) from the drop down *LIT* field.

Step 4: Enter the license plate year (if running a license plate) in the *LIY* field.

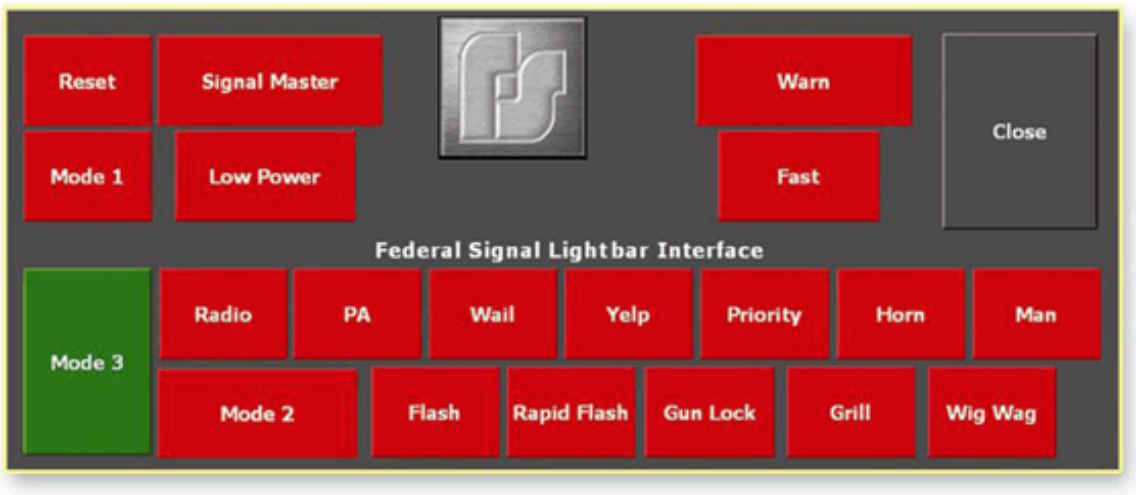
Step 5: Click the **TAG button** if running a license plate or the **DL# button** if running a driver's license number.

Step 6: Click the **Resp button** to display the query results.

SmartSiren® Accessory Toolbar

VelocityCAM™ offers Command & Control of your vehicle's lights, siren and PA system through the optional SmartSiren® integrated display. With a touch of a button the master control panel is displayed. Easy to read buttons signify which light sequence or siren tone is active and which one is not. You can even unlock the shotgun rack from this display.

Please see the SmartSiren User Manual for more information and instructions for use.



E-Ticket

E-Ticket is a powerful ticket writing software package designed to aid law enforcement officers in processing citations more quickly and efficiently than standard means. Integrating with the optional NCIC module, E-Ticket automatically imports NCIC query results reducing the amount of data that needs to be entered by an officer. Upon completion of the citation, it can be printed to an in-vehicle printer and automatically uploaded to the Velocity Message Switch. Officers can easily duplicate a ticket, modify the violation code and issue a second citation to a violator.

Please see the E-Ticket User Manual for more information and instructions for use.

Way Point

Way Points, by definition, are sets of coordinates that specifically identify a point in physical space. This feature has become an invaluable tool within the VelocityCAM Video and Data System. During a vehicle pursuit, as an example, certain events tend to occur, such as throwing a weapon or drug paraphernalia out of a window or running a red light or stop sign. With the Way Point feature, the user can click the mouse key anywhere on the screen and a waypoint will be logged. After the pursuit has ended, the officer can safely place back the video and specifically locate where an event happened on the map.

Adding a Way Point

To mark a way point:

Click the **Way Point button** –or– click anywhere on the *Digital Video Screen* to log the waypoint.

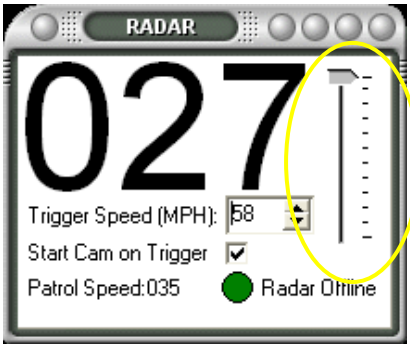
Radar

Clicking the **Radar button** will open the radar window. VelocityCAM is linked with the officer's radar gun. Once connected, the officer can configure VelocityCAM to automatically start recording anytime a vehicle is caught traveling at a certain speed.

> For example: An officer may be parked, running radar in a parking lot off of 'Main Street'. He is aiming the radar down Main Street, a 35 MPH zone. He is able to configure his VelocityCAM client to automatically start recording when a vehicle is caught by radar exceeding a speed of 48 MPH (or any desired speed). The camera automatically starts recording and the entire violation is caught on tape.

Form Transparency

Adjusting the slider bar on the right side of the Radar window controls the opacity of the screen, creating an overlay effect, allowing users to manipulate the transparency (alpha blend) level so the background application is still visible. The user is thereby able to view both the radar window as well as the video screen simultaneously.



Radar Window Settings	Description
Target speed	The speed of the approaching vehicle as seen by the radar.
Trigger Recording at Target Speed Above	Camera system starts recording when the target vehicle speed is above this setting.
Start Cam on Trigger	Indicates that recording is to start when trigger speed is exceeded.
Patrol Speed	Records patrol unit's speed, (as supported by the user's radar mode).
Radar Online	Indicator which shows a connection to the Radar: Green = active connection, Red = communications port error.

Programming the Radar Feature

To set the radar function, follow these steps:

Step 1: Click the **Radar button**.

Step 2: Enter in the desired speed in the *Trigger Speed* field.

Step 3: Make sure the *Start Cam on Trigger* checkbox is checked to start recording when the radar is triggered.

Step 4: Adjust the opacity to the desired level by using the slider.

Note: the thumbtack button saves the radar window position on your computer screen.

Full View

The Full View feature of the VelocityCAM Digital Video System allows you to display the video feed of either Camera 1 or Camera 2 on the entire desktop, subverting the operating system's normal interface.

Entering Full View Mode

To display the Camera 1 video feed in Full View mode, follow these steps:

Step 1: If Camera 1 is not active, activate it by clicking the **CAM 1 button**.

Step 2: Click the **1 Full View button**.

To display the Camera 2 video feed in Full View mode, follow these steps:

Step 1: If Camera 2 is not active, activate it by clicking the **CAM 2 button**.

Step 2: Click the **2 Full View button**.

Canceling Full View Mode

To cancel the Full View mode:

Press the **Escape** key on your keyboard.

© 2009 Federal Signal Corporation

Federal Signal Corporation
2645 Federal Signal Drive
University Park, IL 60484
Phone: (708)-534-3400
Fax: (708)-534-4774
http://www.federalsignal.com
info@fedsig.com